Construction Notice for the Hartman Farms Extension No. 2 138 kV Transmission Line Project

PUCO Case No. 26-0066-EL-BNR

Submitted to:
The Ohio Power Siting Board
Pursuant to Ohio Administrative Code
Section 4906-6-05

Submitted by:
Ohio Power Company

April 13, 2026

CONSTRUCTION NOTICE

Ohio Power Company

Hartman Farms Extension No. 2 138 kV Transmission Line Project

4906-6-05 Accelerated Application Requirements

Ohio Power Company (the "Company") provides the following information to the Ohio Power Siting Board ("OPSB") in accordance with the accelerated application requirements of Ohio Administrative Code Section 4906-6-05.

4906-6-05(B) General Information

B(1) Project Description

The name of the project and applicant's reference number, names and reference number(s) of resulting circuits, a brief description of the project, and why the project meets the requirements for a Construction Notification.

The Company is proposing the Hartman Farms Extension No. 2 138 kV Transmission Line Project (the "Project"), in Hamilton Township, Franklin County, Ohio. The Project consists of constructing approximately 0.7 mile of a double circuit, greenfield 138 kV transmission line. The Project will extend from the existing Cyprus Station (approved Case Numbers 21-0786-EL-BLN and 23-0797-EL-BLN) and into the customer's non-jurisdictional stations. One circuit of the Hartman Farms 138 kV Extension No. 2 will go to the customer's station (Waddlesworth), the second circuit will connect to the existing Hartman Farms 138 kV Extension No. 3 (approved and constructed in Case No. 24-0548-EL-BNR), which connects to the customer's station (Cobblepot). The Project is located entirely on property owned by the customer and will support the customer's new development in the area. The location of the Project is shown on **Maps 1 and 2** in **Appendix A**.

The Project meets the requirements for a Construction Notice ("CN") as defined by Items 1(d)(i) of Appendix A to Ohio Administrative Code Section 4906-1-01, *Application Requirement Matrix for Electric Power Transmission Lines*:

> *(1) New construction, extension, or relocation of single or multiple circuit electric power transmission line(s), or upgrading existing transmission or distribution line(s) for operation at a higher transmission voltage, as follows:*
>
> > *(d) Line(s) primarily needed to attract or meet the requirements of a specific customer or customers as follows:*
> >
> > > *(i) The line is completely on property owned by the specific customer or the applicant.*

The Project has been assigned Case No. 26-0066-EL-BNR.

B(2) Statement of Need

If the proposed Letter of Notification project is an electric power transmission line or gas or natural gas transmission line, a statement explaining the need for the proposed facility.

An existing customer is requesting two additional 138 kV deliveries at their site south of the existing Cyprus Station in Lockbourne, Ohio. The peak demand at the two new customer delivery points is expected to be 100MW. The new deliveries will bring the total peak demand up to 388MW. In order to support the new load the Company will construct approximately 0.7 miles of 138kV double circuit line. To meet the customer's redundancy requirements to the site, each circuit will provide service to a separate customer owned station on the customer's development. The customer requested an in-service date (ISD) of July 1st, 2027, for the additional delivery points.

Failure to move forward with the proposed Project will result in Ohio Power Company's inability to serve the customer's additional load expectations, thereby jeopardizing the customer's plans in the area (688 MW peak).

The Project was not included in the Company's 2025 Long Term Forecast Report, as the solution was not known at the time of filing. However, the Company will include the Project in the 2026 Long Term Forecast Report.

B(3) Project Location

The applicant shall provide the location of the project in relation to existing or proposed lines and substations shown on an area system map of sufficient scale and size to show existing and proposed transmission facilities in the Project area.

The location of the Project in relation to existing transmission lines and substations is shown on **Map 1**, in **Appendix A**. **Map 2**, in Appendix A, identifies the Project components on a 2025 aerial photograph.

B(4) Alternatives Considered

The applicant shall describe the alternatives considered and reasons why the proposed location or route is best suited for the proposed facility. The discussion shall include, but not be limited to, impacts associated with socioeconomic, ecological, construction, or engineering aspects of the project.

The Project represents the shortest and most direct path between the Cyprus Station and the customer's facility. Based on the customer's proposed development and existing facilities in the area, the proposed location of the Hartman Farms Extension No. 2 138 kV Transmission Line is the most suitable location for the Project. Other alternatives would require impacting neighboring properties, as opposed to remaining entirely on customer property. The Project is located on land currently under development, comprised of a

mix of fill material devoid of any significant vegetation and developed open space, which is regularly maintained. The Project will not impact any delineated wetlands or streams. The location of the Project minimizes impacts to the community and the environment, while taking into account the engineering and construction needs of the customer. The Project also represents the most suitable location and most appropriate solution for meeting the Company's and customers' needs.

B(5) Public Information Program

The applicant shall describe its public information program to inform affected property owners and tenants of the nature of the project and the proposed timeframe for project construction and restoration activities.

The Company will mail a letter, via first class mail, to affected landowners, tenants, contiguous owners and any other landowner the Company may approach for an easement necessary for the construction, operation, or maintenance of the Project. The letter will comply with all requirements of OAC Section 4906-6-08(B). The Company maintains a website (AEPOhio.com/OPSBFilings) which hosts an electronic copy of this CN. An electronic copy of the CN will be served to the public library and public officials in each political subdivision affected by this Project. In addition, the Company retains ROW land agents that discuss Project timelines, construction and restoration activities and convey this information to affected owners and tenants.

B(6) Construction Schedule

The applicant shall provide an anticipated construction schedule and proposed in-service date of the project.

Construction of the Project is planned to begin in June 2026 with an anticipated in-service date of September 2026.

B(7) Area Map

The applicant shall provide a map of at least 1:24,000 scale clearly depicting the facility with clearly marked streets, roads, and highways, and an aerial image.

Map 1, in **Appendix A**, identifies the location of the Project area on a United States Geological Survey 1:24,000 quadrangle map (Jersey). **Appendix A, Map 2** is a 2025 aerial map of the Project area.

B(8) Property Agreements

The applicant shall provide a list of properties for which the applicant has obtained easements, options, and/or land use agreements necessary to construct and operate the facility and a list of the additional properties for which such agreements have not been obtained.

The Company is in discussion with the customer to obtain an easement on the customer's property for the Project. A list of properties required for the Project are provided in **Table 1** below.

Table 1 – Property Agreements

Property Parcel Number	Agreement Type	Easement or Option Obtained (Yes/No)
510-180711-00	New Easement Agreement	No

The easement form exhibit provided in **Appendix B** represents the minimum rights the Company would require in order to construct, operate, and maintain these facilities.

B(9) Technical Features

The applicant shall describe the following information regarding the technical features of the project:

B(9)(a) Operating characteristics, estimated number and types of structures required, and right-of-way and/or land requirements.

The Hartman Farms Extension No. 2 138 kV Transmission Line is estimated to include the following:

Voltage:	138 kV
Conductors:	Double Circuit, 3-Bundle 795 kcmil 26/7 ACSR Drake
Static Wire:	One (1) 0.646" 96 Ct OPGW & One (1) 7#8 Alumoweld
Insulators:	Polymer
ROW Width:	100 feet
Structure Type(s):	Four (4) 1-pole double circuit steel tangent structures with direct embed foundations Three (3) 2-pole self-supporting steel deadend structures on concrete pier foundations with anchor bolts

The second circuit to the existing Hartman Farms Extension No. 2 138 kV Transmission Line which connects to the customers Cobblepot station is estimated to include the following:

Voltage:	138 kV
Conductors:	Single Circuit, 795 kcmil 26/7 ACSR Drake
Static Wire:	N/A
Insulators:	Polymer
ROW Width:	100 feet
Structure Type(s):	None

B(9)(b) Electric and Magnetic Fields

For electric power transmission lines that are within one hundred feet of an occupied residence or institution, the production of electric and magnetic fields during the operation of the proposed electric power transmission line.

B(9)(b)(i) Calculated Electric and Magnetic Field Strength Levels

i) Calculated Electric and Magnetic Field Levels

Not applicable. No occupied residences or institutions are located within 100 feet of the Project.

B(9)(b)(ii) Design Alternatives

A discussion of the applicant's consideration of design alternatives with respect to electric and magnetic fields and their strength levels, including alternate conductor configuration and phasing, tower height, corridor location, and right-of-way width.

Not applicable. No occupied residences or institutions are located within 100 feet of the Project.

B(9)(b)(ii)(c) Project Cost

The estimated capital cost of the project.

The cost estimate for the proposed Project, which is comprised of applicable tangible and capital costs, is approximately $5,620,000 based on a Class 4 estimate. Forty percent (40%) of the costs of the Project will be recovered through reimbursement from the customer. The remaining sixty percent (60%) of the costs for the ROW portion of the Project will be recovered in Ohio Power Company's FERC formula rate and allocated to the AEP Zone pursuant to the PJM OATT.

B(10) Social and Economic Impacts

The applicant shall describe the social and ecological impacts of the project:

B(10)(a) Operating Characteristics

Provide a brief, general description of land use within the vicinity of the proposed project, including a list of municipalities, townships, and counties affected.

The Project is located in Hamilton Township, Franklin County, Ohio. Land use in the Project area is predominantly agricultural vacant land or industrial land, as classified by the Franklin County Auditor. A residential subdivision is located approximately 0.2 mile north of the Project. There are no parks, churches, cemeteries, wildlife management areas, or nature preserve lands within 1,000 feet of the centerline of the Project. A property containing Hamilton Middle School and Hamilton Elementary School is located approximately 850 feet northeast of the existing Cyprus Station.

B(10)(b) Agricultural Land Information

Provide the acreage and a general description of all agricultural land, and separately all agricultural district land, existing at least sixty days prior to submission of the application within the potential disturbance area of the project.

No agricultural easements designated by the Ohio Department of Agriculture (ODA) are located in the Project Area. No properties registered as agricultural district land are located in the Project area based on email coordination with the Franklin County Auditor's Office on April 8th, 2026. The Project occupies approximately 16.5 acres, all of which has historically been used for row crop land, however, the Project area as undergone significant development and consists of either vacant land undergoing development or industrial land.

B(10)(c) Archaeological and Cultural Resources

Provide a description of the applicant's investigation concerning the presence or absence of significant archaeological or cultural resources that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.

The Company's consultant completed Phase I Archaeological and Phase I History/Architectural surveys to be coordinated with the State Historic Preservation Office ("SHPO"). The Company is recommending that the Project will have no adverse effect on historic properties and no further cultural resource work would be necessary. The results of the coordination with SHPO will be provided to OPSB once it has been received.

B(10)(d) Local, State, and Federal Agency Correspondence

Provide a list of the local, state, and federal governmental agencies known to have requirements that must be met in connection with the construction of the project, and a list of documents that have been or are being filed with those agencies in connection with siting and constructing the project.

A summary of anticipated permits and authorizations for the Project is provided in **Table 2**, below. There are no other known local, state, or federal requirements that must be met prior to commencement of the Project.

Table 2 – Anticipated Permits

Permit/Authorization/Coordination	Agency	Date
Storm Water Pollution Prevention Plan	Ohio Environmental Protection Agency	Expected April 2026
	City of Columbus	
Archaeology/Architectural	Ohio Historic Preservation Office (SHPO)	Expected April 2026

Permit/Authorization/Coordination	Agency	Date
Threatened and Endangered Species	United States Fish and Wildlife Service	Consultation completed 12/16/2025
Threatened and Endangered Species	Ohio Department of Natural Resources	Consultation completed 1/6/2026

B(10)(e) Threatened, Endangered, and Rare Species

Provide a description of the applicant's investigation concerning the presence or absence of federal and state designated species (including endangered species, threatened species, rare species, species proposed for listing, species under review for listing, and species of special interest) that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.

Coordination letters were submitted to the United State Fish and Wildlife Service (USFWS) and the Ohio Department of Natural Resources (ODNR) Ohio Natural Heritage Program (ONHP) and Division of Wildlife (DOW), seeking an environmental review of the Project for potential impacts to state and/or federally protected species. USFWS and ODNR provided responses on December 16, 2025, and January 6, 2026, respectively. Copies of the agencies' responses are presented in **Appendix C**.

Table 4, in **Appendix C** lists the federal and state threatened or endangered species in the Project area.

Based on the nature of the proposed Project activities and habitat characteristics of the surrounding vicinity, construction impacts to protected species are not anticipated.

B(10)(f) Areas of Ecological Concern

Provide a description of the applicant's investigation concerning the presence or absence of areas of ecological concern (including national and state forests and parks, floodplains, wetlands, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, and wildlife sanctuaries) that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.

In December 2025, the Company's consultant conducted wetland and stream delineation surveys for an approximately 21.1-acre survey area encompassing the Project (see **Appendix C**). These surveys identified no streams or wetlands within the Project area. Three upland drainage features were delineated within the Project area, two of which are crossed by the Project. Additionally, one pond was observed outside of the Project Survey Area. No impacts are anticipated to these features. No other areas of ecological concern were identified within the Project area.

Based on a review of the Protected Areas Database of the United States as well as the Conservation Easement Database, there are no state or national parks, forests, wildlife areas or mapped conservation easements in the vicinity of the Project.

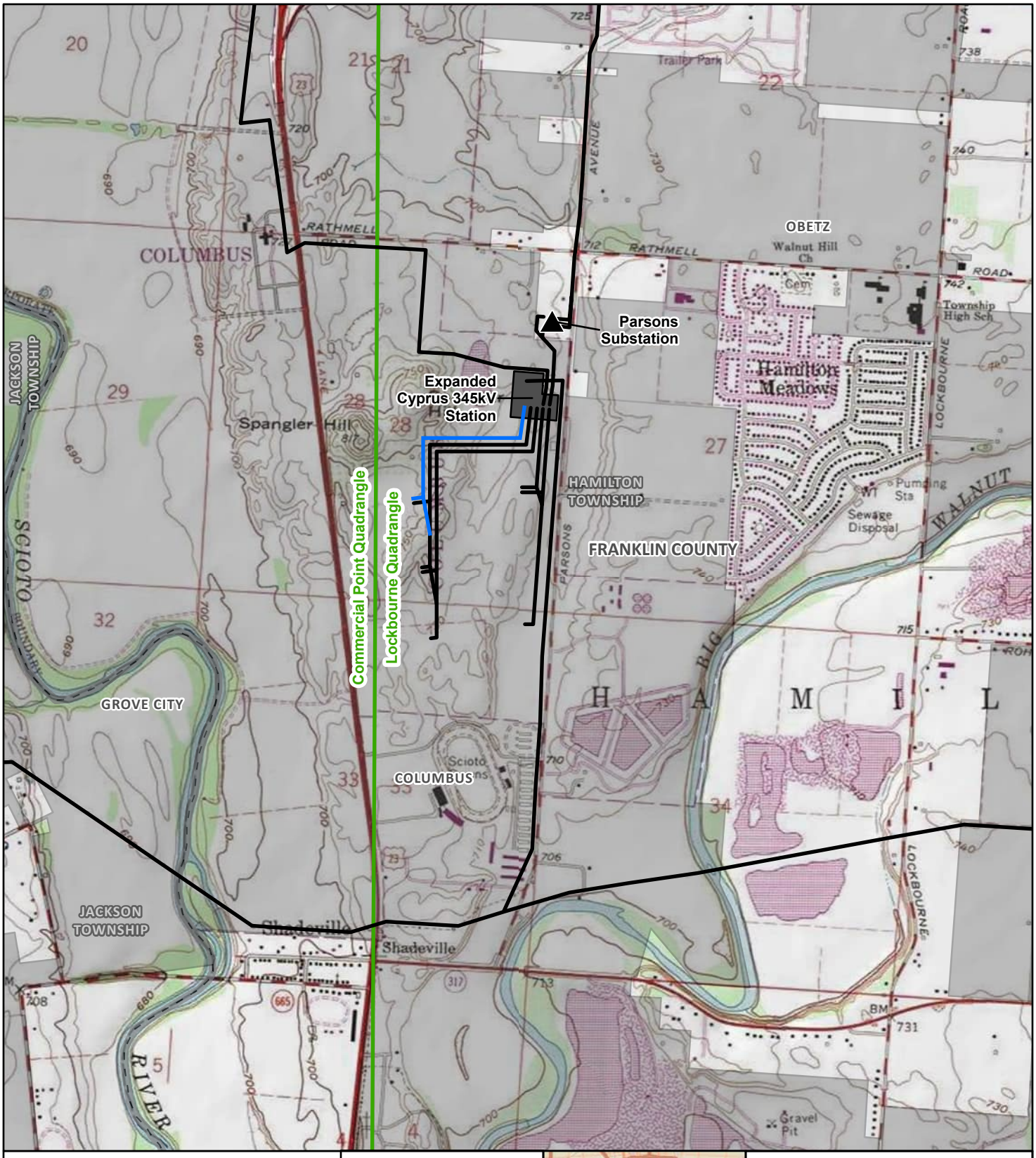
The FEMA Flood Insurance Rate Map (map number 39049C0426K) was reviewed to check for the presence of floodplains/flood hazard areas within the Project area. No mapped FEMA floodplains are located in the Project area.

B(10)(g) Unusual Conditions

Provide any known additional information that will describe any unusual conditions resulting in significant environmental, social, health, or safety impacts.

To the best of the Company's knowledge, no unusual conditions exist that would result in significant environmental, social, health, or safety impacts.

Appendix A Project Maps



Existing AEP Substation
Hartman Farms Extension No. 2 138 kV Transmission Line
Existing Transmission Line
Expanded Cyprus Station
USGS 7.5' Topographic Quad Boundary
Municipality
Township Boundary

Sources:
USGS (2021)

State Plane Ohio
South NAD 83

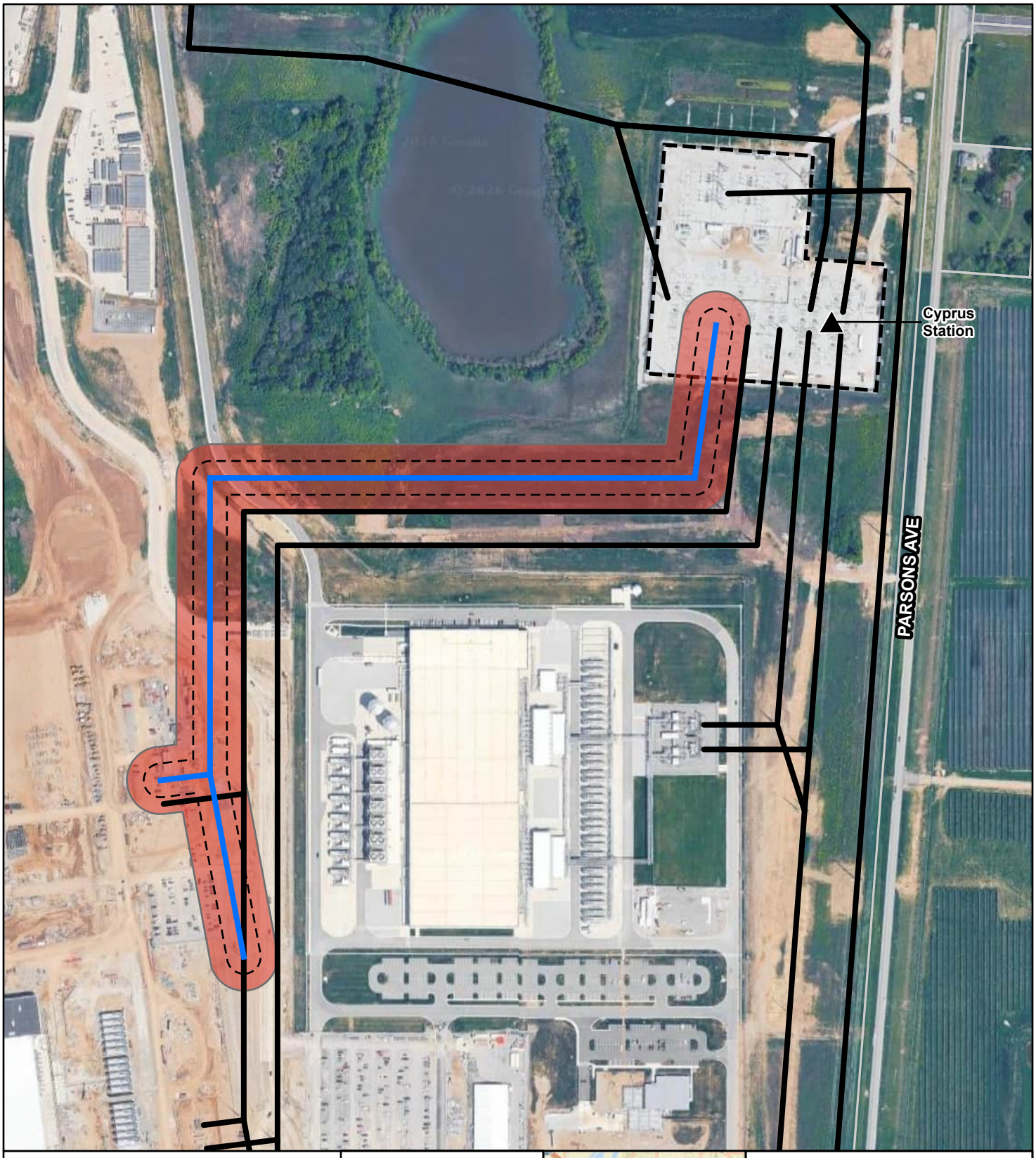
March 11, 2026

Map 1
Project Area

AEP OHIO

Hartman Farms Extension No. 2 138 kV Transmission Line Project

0 1,000 2,000 3,000
Feet



Existing AEP Station
Hartman Farms Extension No. 2 138 kV Transmission Line
Existing Transmission Line
Expanded Cyprus Station
Project 100ft ROW
Project Route Corridor
Parcel Boundary

Sources:
Google Earth Imagery (2025)

State Plane Ohio
South NAD 83

March 11, 2026

Map 2
Aerial Map

Hartman Farms
Extension No. 2 138 kV
Transmission Line Project

0 200 400 600
Feet

Appendix B Form Easement

TEMPORARY EASEMENT
1.041 ACRE

Situate in the State of Ohio, County of Franklin, City of Columbus, lying in Section 28, Township 4, Range 22, Congress Lands East of Scioto River, being on over and across that 496.072 acre tract conveyed to Magellan Enterprises LLC by deed of record in Instrument Number 202105210090589 (all references are to the records of the Recorder's Office, Franklin County, Ohio) and being more particularly described as follows:

Beginning, for reference at the common corner of the remainder of said 496.072 acre tract and that 1.300 acre tract conveyed to City of Columbus, Ohio by deed of record in Instrument Number 202108130143406, in the southerly line of that 8.00 acre tract conveyed to Columbus and Southern Ohio Electric Company by deed of record in Deed Book 2786, Page 558;

Thence South 04° 17' 37" West, with the line common to the remainder of said 496.072 acre tract and said 1.300 acre tract, a distance of 1339.40 feet to a point;

Thence South 04° 20' 46" West, continuing with the line common to the remainder of said 496.072 acre tract and said 1.300 acre tract, a distance of 1419.34 feet to a point;

Thence North 85° 39' 14" West, across said 496.072 acre tract, a distance of 1962.33 feet to the TRUE POINT OF BEGINNING;

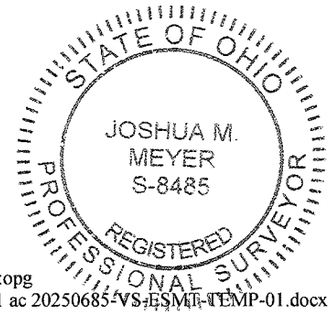
Thence across said 496.072 acre tract, the following courses and distances:

South 10° 27' 46" East, a distance of 253.48 feet to a point;

North 90° 00' 00" West, a distance of 197.53 feet to a point;

North 07° 08' 28" West, a distance of 228.50 feet to a point;

North 82° 51' 32" East, a distance of 181.31 feet to the TRUE POINT OF BEGINNING, containing 1.041 acres, more or less.



EVANS, MECHWART, HAMBLETON & TILTON, INC.

November 21, 2025

Joshua M. Meyer
Professional Surveyor No. 8485

Date

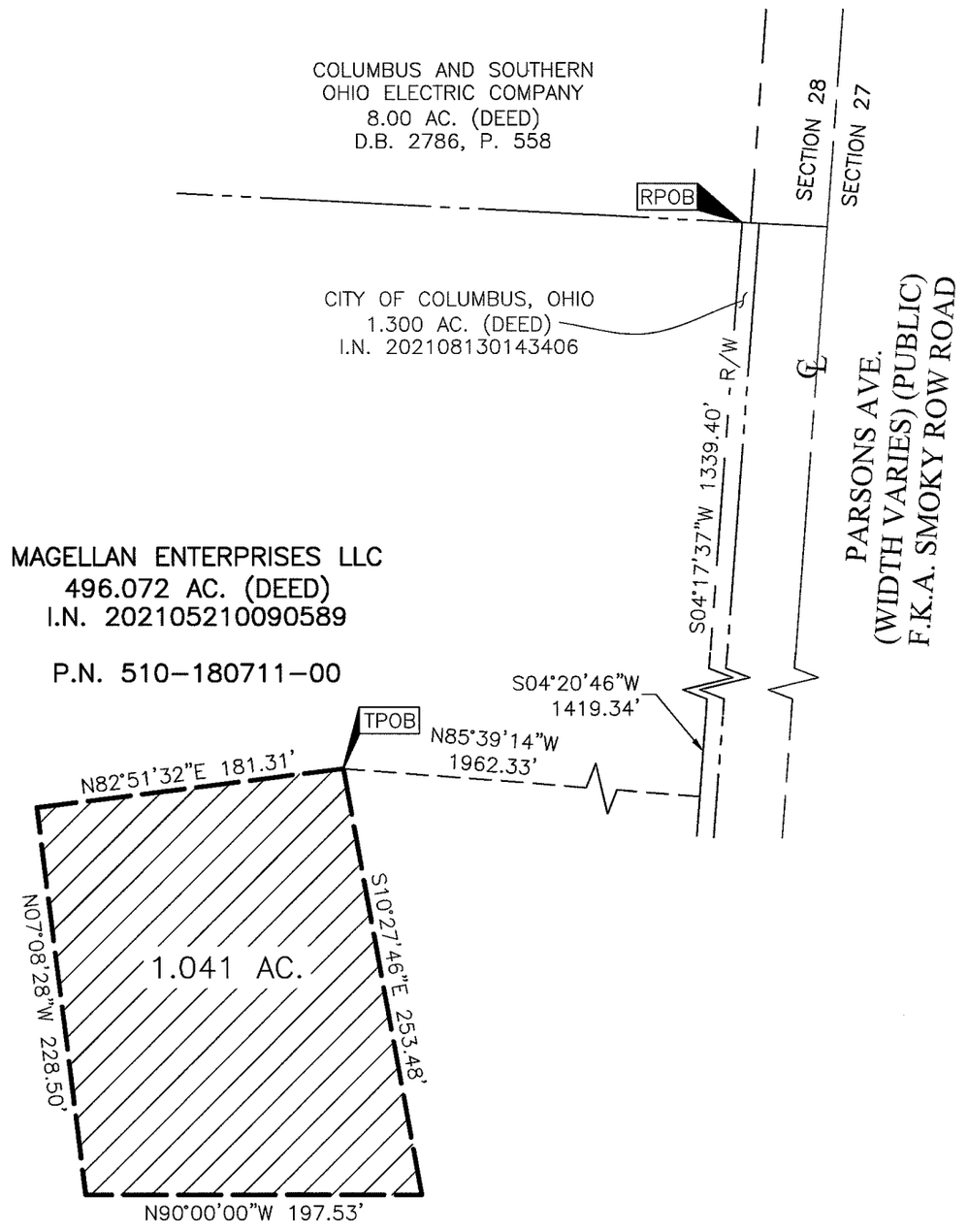
JMM:opg
1_041 ac 20250685-VS-ESMT-TEMP-01.docx

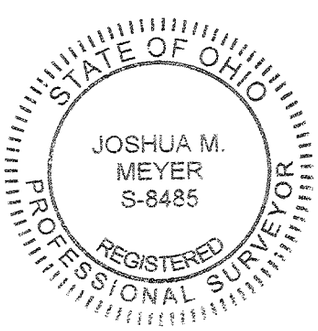
EMH&T
Evans, Mechwart, Hambleton & Tilton, Inc.
Engineers • Surveyors • Planners • Scientists
5500 New Albany Road, Columbus, OH 43054
Phone: 614.775.4500 Toll Free: 888.775.3648
emht.com

TEMPORARY EASEMENT

SECTION 28, TOWNSHIP 4, RANGE 22
CONGRESS LANDS EAST OF SCIOTO RIVER
CITY OF COLUMBUS, COUNTY OF FRANKLIN, STATE OF OHIO

Date:	November 21, 2025	Scale:	1" = 100'	Job No:	2025-0685	Sheet No:	1 of 1





0 100
SCALE (in feet)

By _____ 11-21-25

Joshua M. Meyer
Professional Surveyor No. 8485
jmeyer@emht.com

Date

J:\20250685\Dwg\04Sheets\Easements\20250685-VS-ESMT-TEMP-01.dwg plotted by Goodheart, Owen on 11/21/2025 9:11:16 AM last saved by ogoodheart on 11/20/2025 8:12:52 AM

EASEMENT
7.025 ACRE

Situate in the State of Ohio, County of Franklin, City of Columbus, lying in Section 28, Township 4, Range 22, Congress Lands East of Scioto River, being on over and across that 496.072 acre tract conveyed to Magellan Enterprises LLC by deed of record in Instrument Number 202105210090589, and Lot 2 of that plat titled "German Estate on Walnut Creek" as demonstrated in Plat Book 2, Page 367 (all references are to the records of the Recorder's Office, Franklin County, Ohio) and being more particularly described as follows:

Beginning, for reference at the common corner of the remainder of said 496.072 acre tract and that 1.300 acre tract conveyed to City of Columbus, Ohio by deed of record in Instrument Number 202108130143406, the southerly line of that 8.00 acre tract conveyed to Columbus and Southern Ohio Electric Company by deed of record in Deed Book 2786, Page 558;

Thence South 04° 17' 37" West, with the line common to the remainder of said 496.072 acre tract and said 1.300 acre tract, a distance of 1184.30 feet to a point;

Thence North 85° 39' 14" West, across said 496.072 acre tract, a distance of 572.20 feet to the TRUE POINT OF BEGINNING;

Thence across said 496.072 acre tract, the following courses and distances:

South 04° 20' 46" West, a distance of 344.88 feet to a point;

South 90° 00' 00" West, a distance of 1432.29 feet to a point;

South 00° 00' 00" East, a distance of 1374.53 feet to a point;

North 10° 27' 46" West, a distance of 428.81 feet to a point;

South 82° 53' 10" West, a distance of 104.82 feet to a point;

North 07° 06' 51" West, a distance of 169.79 feet to a point;

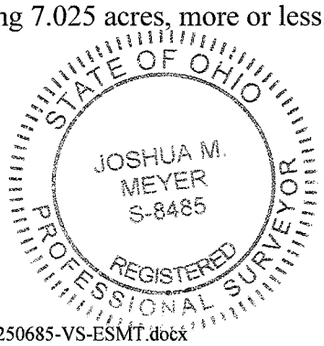
North 82° 53' 10" East, a distance of 103.71 feet to a point;

North 00° 00' 00" West, a distance of 884.51 feet to a point;

North 90° 00' 00" East, a distance of 1439.60 feet to a point;

North 04° 20' 46" East, a distance of 252.20 feet to a point;

South 85° 39' 14" East, a distance of 100.00 feet to the TRUE POINT OF BEGINNING, containing 7.025 acres, more or less.



EVANS, MECHWART, HAMBLETON & TILTON, INC.

November 21, 2025

Joshua M. Meyer
Professional Surveyor No. 8485

Date

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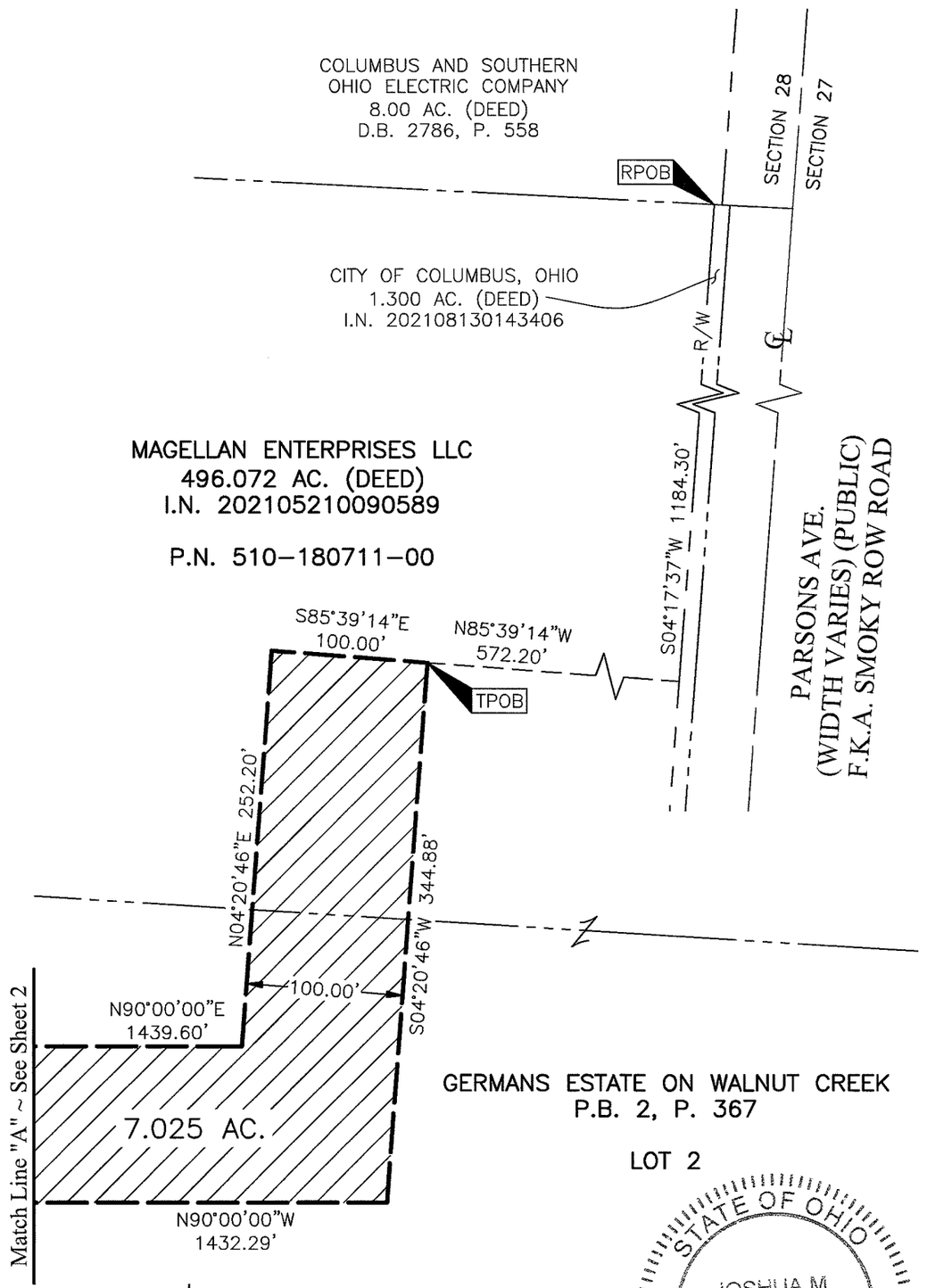
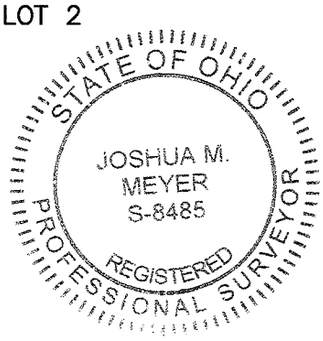
CITY OF COLUMBUS, COUNTY OF FRANKLIN, STATE OF OHIO

Date:	November 21, 2025	Scale:	1" = 100'	Job No:	2025-0685	Sheet No:	1 of 2





0 100
SCALE (in feet)

By _____ 11-21-25

Joshua M. Meyer
Professional Surveyor No. 8485
jmeyer@emht.com

Date

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CITY OF COLUMBUS, COUNTY OF FRANKLIN, STATE OF OHIO

Date:	November 21, 2025	Scale:	1" = 100'	Job No:	2025-0685	Sheet No:	2 of 2

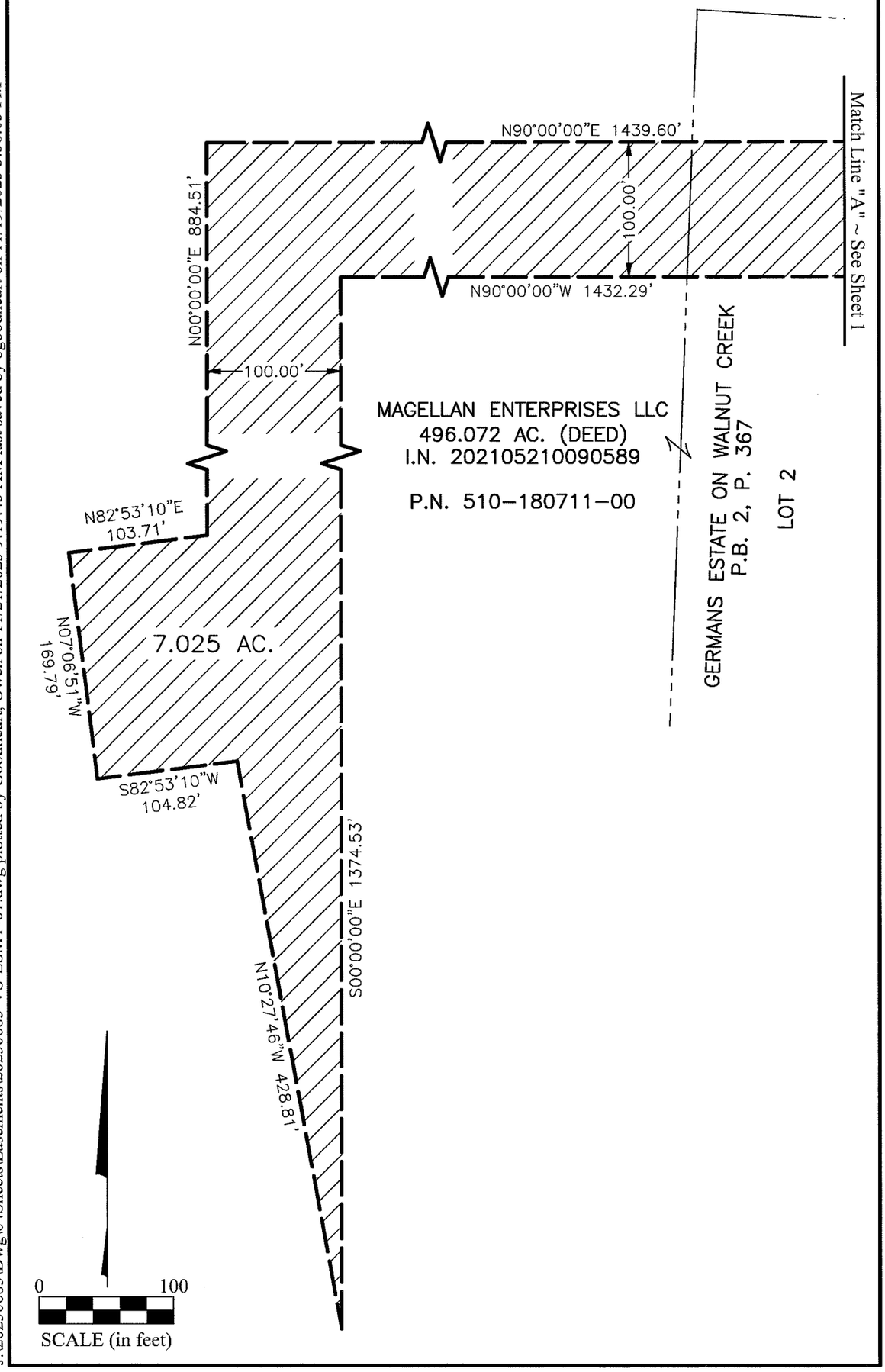


EXHIBIT D

GRANTOR'S IMPROVEMENTS WITHIN THE LINE EASEMENT

PAGE 1

PFK COMPANY II LLC
PID: 510-181566
S HIGH ST
209.51 Ac

CHURCHES OF CHRIST IN
PID: 010-258025
464 RATHMELL RD
23.06 Ac

13.315 AC.
EX ELECTRIC EASEMENT
I.N. 202112170229502

0.588 AC.
EX 30' ACCESS EASEMENT
I.N. 202112170229502

COLUMBUS & SOUTHERN
PID: 150-000812
4999 PARSONS AV

HAMILTON LOCAL SCHOOL
PID: 152-001741
745 RATHMELL RD
21.97 Ac

TOTAL AREA OF
SITE ENCUMBERED BY
EXISTING AEP EASEMENTS:
78.784 AC.

AREA OF SITE ENCUMBERED BY AEP EASEMENTS GRANTED UNDER THIS INSTRUMENT EXCLUSIVE OF OVERLAP W/ EXISTING AEP EASEMENTS:
6.755 AC.

TOTAL AREA
OF SITE ENCUMBERED BY
AEP EASEMENTS:
85.539 AC.

HAMILTON LOCAL SCHOOL
PID: 152-001748
755 RATHMELL RD
19.94 Ac

OBERT WALTER
& PAMELA J
PID: 150-000049
5172 PARSONS AVE
2.38 Ac

2.23 AC.
EX ELECTRICAL EASEMENT
OVERLAP AREA: 1.27 AC
I.N. 202312120128856

20.601 AC. EX NON-EXCLUSIVE
SUBSTATION EASEMENT AREA.
I.N. 202112170229502

7.244 AC.
SUBSTATION EXCLUSIVE
EX EASEMENT AREA.
I.N. 202112170229502

6.090 AC.
EX ELECTRIC EASEMENT.
I.N. 202112170229502

PFK COMPANY I LLC
PID: 510-181564
4755 S HIGH ST
247.24 Ac

7.025 AC
PROP ELECTRICAL
EASEMENT
OVERLAP AREA:0.27 AC
(VS-ESMT-POWR-XX)

21.96 AC.
EX ELECTRICAL EASEMENT
OVERLAP AREA: 4.52 AC.
I.N. 202312120128856

MAGELLAN LLC
PID: 510-180711
5076 S HIGH ST
495.95 Ac

0.224 AC
EX ELECTRICAL EASEMENT
I.N. 202504220040713

19.872 AC
EX ELECTRICAL EASEMENT
OVERLAP AREA: 0.54 AC
I.N. 202409230098777

CITY OF COLUMBUS OHIO
PID: 010-238026
5414 PARSONS AVE
155.19 Ac

5.15 AC.
EX ELECTRICAL EASEMENT
OVERLAP AREA: 0.63 AC.
I.N. 202312120128856

PFK COMPANY II LLC
PID: 510-291662
6055 S HIGH ST
156.96 Ac

CITY OF COLUMBUS OHIO
PID: 510-180715
5600 PARSONS AVE
181.00 Ac

SCIOTO DOWNS INC
PID: 495-291118
6000 S. HIGH ST
167.80 Ac

GRAPHIC SCALE
0 125 250 500
1 INCH =250 FEET

Evans, Mechwart, Hambleton & Tilton, Inc.
Engineers • Surveyors • Planners • Scientists
5500 New Albany Road, Columbus, OH 43054
Phone: 614.775.4500 Toll Free: 888.775.3648
emht.com

DATE: December 12, 2025
SCALE: AS NOTED
JOB NO.: 20230820
SHEET: 1 OF 3

REVISIONS

MARK	DATE	DESCRIPTION

EXHIBIT D

GRANTOR'S IMPROVEMENTS WITHIN THE LINE EASEMENT

PAGE 2

PFK COMPANY II LLC
PID: 510-181566
S HIGH ST
209.51 Ac

CHURCHES OF CHRIST IN
PID: 010-258025
464 RATHMELL RD
23.06 Ac

13.315 AC
EX ELECTRIC EASEMENT
I.N. 202112170229502

0.588 AC.
EX 30' ACCESS EASEMENT
I.N. 202112170229502

COLUMBUS & SOUTHERN
PID: 150-000812
4999 PARSONS AV

HAMILTON LOCAL SCHOOL
PID: 152-001741
745 RATHMELL RD
21.97 Ac

TOTAL AREA OF
SITE ENCUMBERED BY
EXISTING AEP EASEMENTS:
78.784 AC.

AREA OF SITE ENCUMBERED BY AEP EASEMENTS GRANTED UNDER THIS INSTRUMENT EXCLUSIVE OF OVERLAP W/ EXISTING AEP EASEMENTS:
6.755 AC.

TOTAL AREA
OF SITE ENCUMBERED BY
AEP EASEMENTS:
85.539 AC.

HAMILTON LOCAL SCHOOL
PID: 152-001748
755 RATHMELL RD
19.94 Ac

OBERT WALTER
& PAMELA J
PID: 150-000049
5172 PARSONS AVE
2.38 Ac

2.23 AC.
EX ELECTRICAL EASEMENT
OVERLAP AREA: 1.27 AC
I.N. 202312120128856

20.601 AC. EX NON-EXCLUSIVE
SUBSTATION EASEMENT AREA.
I.N. 202112170229502

7.244 AC.
SUBSTATION EXCLUSIVE
EX EASEMENT AREA.
I.N. 202112170229502

SEE SHEET 3,
DETAIL A

PFK COMPANY I LLC
PID: 510-181564
4755 S HIGH ST
247.24 Ac

6.090 AC.
EX ELECTRIC EASEMENT.
I.N. 202112170229502

7.025 AC
PROP ELECTRICAL
EASEMENT
OVERLAP AREA:0.27 AC
(VS-ESMT-POWR-XX)

21.96 AC.
EX ELECTRICAL EASEMENT
OVERLAP AREA: 4.52 AC.
I.N. 202312120128856

SEE SHEET 3,
DETAIL B

MAGELLAN LLC
PID: 510-180711
5076 S HIGH ST
495.95 Ac

0.224 AC
EX ELECTRICAL EASEMENT
I.N. 202504220040713

19.872 AC
EX ELECTRICAL EASEMENT
OVERLAP AREA: 0.54 AC
I.N. 202409230098777

CITY OF COLUMBUS OHIO
PID: 010-238026
5414 PARSONS AVE
155.19 Ac

5.15 AC.
EX ELECTRICAL EASEMENT
OVERLAP AREA: 0.63 AC.
I.N. 202312120128856

PFK COMPANY II LLC
PID: 510-291662
6055 S HIGH ST
156.96 Ac

CITY OF COLUMBUS OHIO
PID: 510-180715
5600 PARSONS AVE
181.00 Ac

SCIOTO DOWNS INC
PID: 495-291118
6000 S. HIGH ST
167.80 Ac

GRAPHIC SCALE
0 125 250 500
1 INCH =250 FEET

Evans, Mechwart, Hambleton & Tilton, Inc. Engineers • Surveyors • Planners • Scientists 5500 New Albany Road, Columbus, OH 43054 Phone: 614.775.4500 Toll Free: 888.775.3648 emht.com	DATE: December 12, 2025 SCALE: AS NOTED JOB NO.: 20230820 SHEET: 2 OF 3

REVISIONS

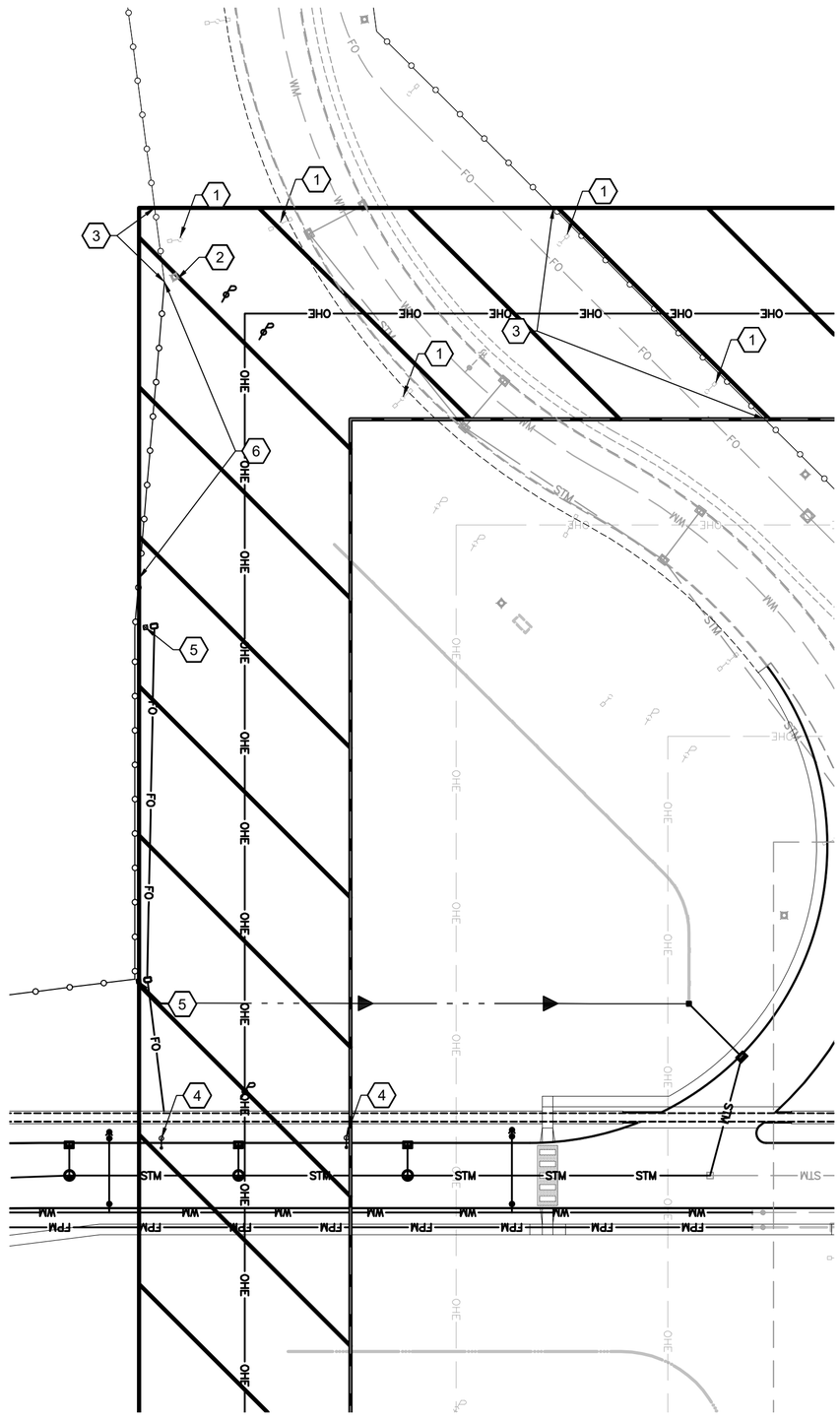
MARK	DATE	DESCRIPTION

J:\20250019\Dwg\04Sheets\Exhibits\AEP\2025.12.12 Exhibit D Permanent Easement AEP Encroachment Exhibit.dwg, Last Saved By: ekovach, 12/12/2025 1:22 PM Last Printed By: Kovach, Evan, 12/12/2025 1:24 PM 4 Xrefs: CLB-3A-SITE LAYOUT, CLB-3A-UTILITY, CLB-3A-V-SITE-SURVEY, CLB-3A-V-UTILITY

EXHIBIT D

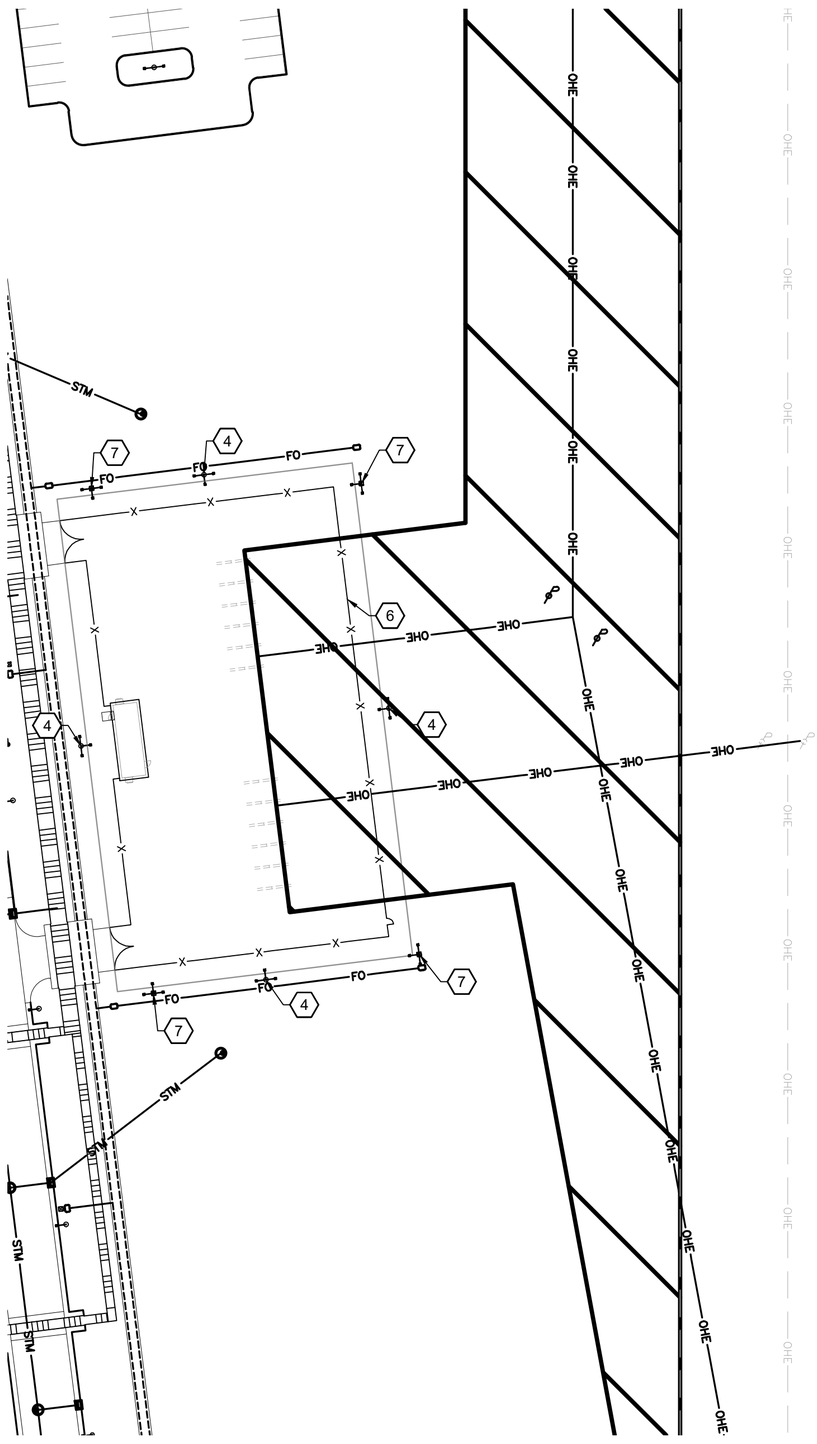
GRANTOR'S IMPROVEMENTS WITHIN THE LINE EASEMENT

PAGE 3



A DETAIL

1" = 50'



B DETAIL

1" = 50'

KEY NOTES

1. EX 28' LIGHT POLE
2. EX 30' SECURITY POLE
3. EX 10' SECURITY FENCE
4. PROP 28' LIGHT POLE
5. PROP 30' SECURITY POLE
6. PROP 10' SECURITY FENCE
7. PROP 28' LIGHT POLE WITH SECURITY CAMERA
8. PROP 8' CHAIN LINK FENCE

GRAPHIC SCALE

0 25 50 100

1 INCH = 50 FEET

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Engineers • Surveyors • Planners • Scientists
5500 New Albany Road, Columbus, OH 43054
Phone: 614.775.4500 Toll Free: 888.775.3648
emht.com

DATE: 2025-12-12

SCALE: AS NOTED

JOB NO.: 20250019

SHEET: 3 OF 3

REVISIONS

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EXHIBIT D

GRANTOR'S IMPROVEMENTS WITHIN THE LINE EASEMENT

PAGE 1

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TOTAL AREA
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2.23 AC.
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emht.com

DATE: December 12, 2025
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SHEET: 1 OF 3

REVISIONS

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EXHIBIT D

GRANTOR'S IMPROVEMENTS WITHIN THE LINE EASEMENT

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SEE SHEET 3,
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emht.com

DATE: December 12, 2025
SCALE: AS NOTED
JOB NO.: 20230820
SHEET: 2 OF 3

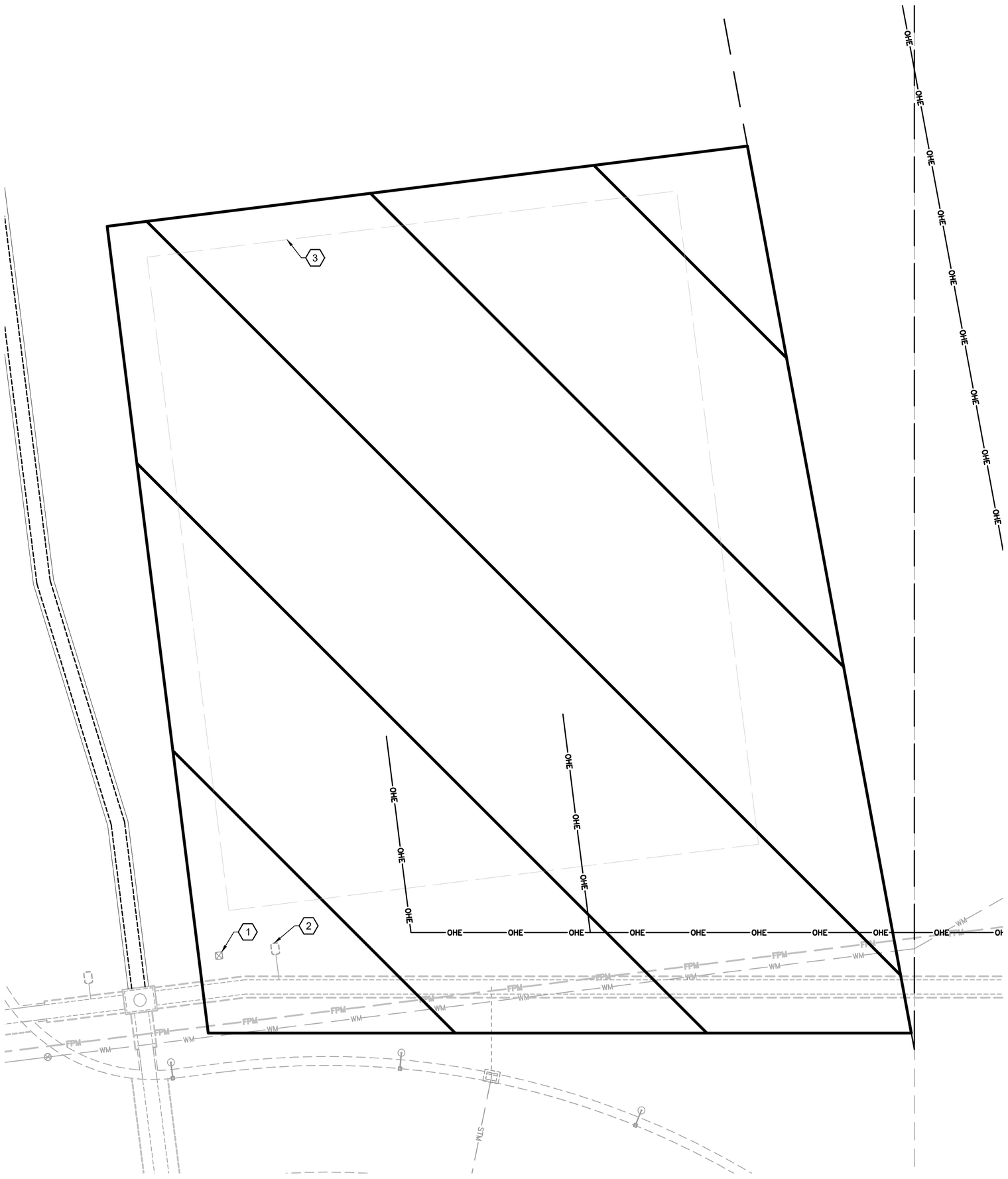
REVISIONS

MARK	DATE	DESCRIPTION

EXHIBIT D

GRANTOR'S IMPROVEMENTS WITHIN THE LINE EASEMENT

PAGE 3



A DETAIL

1" = 20'

KEY NOTES

1. EX 30' SECURITY POLE
2. EX TELECOM HANDHOLE
3. PROP TEMPORARY ELECTRICAL EQUIPMENT

GRAPHIC SCALE

0 10 20 40

1 INCH = 20 FEET

EMH&T

Evans, Mechwart, Hambleton & Tilton, Inc.
Engineers • Surveyors • Planners • Scientists
5500 New Albany Road, Columbus, OH 43054
Phone: 614.775.4500 Toll Free: 888.775.3648
emht.com

DATE: 2025-12-12

SCALE: AS NOTED

JOB NO.: 20250019

SHEET: 3 OF 3

REVISIONS

MARK	DATE	DESCRIPTION

Appendix C Ecological Report

AEP HARTMAN FARM EXT #2 INSTALL AND HARTMAN EXT #3 MODIFY

FRANKLIN COUNTY, OHIO

ECOLOGICAL REPORT

Prepared for:
American Electric Power Ohio Transmission Company
8600 Smiths Mill Road
New Albany, Ohio 43054

Prepared by:

436 Seventh Avenue, Suite 1200
Pittsburgh, PA 15219
Project #: 60770770, 60770783

January 2026

TABLE OF CONTENTS

TABLES (in-text)

FIGURES

APPENDICES

1.0 INTRODUCTION

American Electric Power, Ohio Transmission Company (AEP Ohio Transco) is proposing the Cyprus Building No. 5 Projects: Hartman Farm Ext #2 and Hartman Ext #3 Modify, herein "Project", within the City of Columbus, Franklin County, Ohio (OH). The overall Project consists of two components with overlapping boundaries totaling approximately 21.10 acres.

- **Hartman Farm Ext #2**: The purpose of this component is to construct approximately 0.65 miles of double circuit 138 kV. The estimated survey area includes a 200-foot-wide corridor encompassing approximately 16.50 acres.

- **Hartman Ext #3 Modify:** The purpose of this component is to reconfigure the feed to Building 5 and modify the feed to Building 4. The estimated survey area includes a 100-foot-wide corridor encompassing approximately 9.57 acres.

The Project Survey Area associated with this Ecological Report is located within Lockbourne, OH United States Geological Survey (USGS) 7.5-minute topographical quadrangle as displayed on the Project Overview (**Figure 1**).

The purpose of the field survey was to assess the presence of wetlands and possible "waters of the United States" (WOTUS) that occur within the proposed Project Survey Area. Secondarily, land uses were also recorded to classify and characterize potential habitat for threatened and endangered species. This report will be used to assist AEP Ohio Transco's efforts to identify potential WOTUS as well as threatened and endangered species habitat present within the proposed Project Survey Area to avoid or minimize impacts during construction activities.

2.0 METHODOLOGY

The field survey was completed for a 200-foot-wide corridor along the proposed transmission line centerline for Hartman Farm Ext #2 and a 100-foot-wide corridor along the proposed transmission line centerline for Hartman Ext #3 Modify, identified herein as Project Survey Area, totaling approximately 21.10 acres. Prior to conducting field surveys, digital United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey data, United States Fish and Wildlife Service (USFWS), National Wetlands Inventory (NWI) data, USGS National Hydrography Dataset (NHD), Federal Emergency Management Agency (FEMA) 100-year floodplain data, and USGS 7.5-minute topographic maps were reviewed to identify the occurrence and location of potential wetland areas and/or streams.

Field survey activities included recording the physical boundaries of observed water features using sub-meter capable EOS Arrow Global Positioning System (GPS) units in conjunction with the Arc Geographic Information System (GIS) Field Maps application on iPad tablets. The GPS data were imported into ArcMap

Geographic Information System (GIS) software, where the data was reviewed, edited for accuracy, and compiled in a format suitable for transfer and use by AEP Ohio Transco. Water features were delineated and assessed based upon the appropriate procedures detailed below. Land uses observed within the Project Survey Area were assigned a general classification based upon the principal land characteristics and vegetative cover of the location.

2.1 WETLAND DELINEATION

The Project Survey Area was evaluated according to the procedures outlined in the United States Army Corps of Engineers (USACE) *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0) (Regional Supplement) (USACE, 2010)*.

During field survey activities, AECOM utilized the routine on-site delineation method described in the 1987 manual and the regional supplement that consisted of a pedestrian site reconnaissance, including identifying the vegetative communities, soils identification, a geomorphologic assessment of hydrology, and notation of disturbance. If a wetland was identified, AECOM completed a USACE Wetland Determination Data Sheet (USACE Data Form) within each unique wetland habitat to serve as a representative of the wetland hydrology, vegetative community, and soil characteristics. Adjacent to each wetland, AECOM completed an additional USACE Data Form as a representative of the upland community.

2.1.1 WETLAND CLASSIFICATION

Wetlands identified in the field were classified based on the naming convention found in Classification of Wetlands and Deepwater Habitats of the United States (FGDC, 2013). The unique wetland habitats were classified as palustrine emergent (PEM), palustrine forested (PFO), palustrine unconsolidated bottom (PUB), palustrine scrub-shrub (PSS), or other classifications for some wetlands. Multiple Cowardin classifications may be present where more than one classification's vegetation is dominant (vegetation type covers 30 percent or more of the substrate). Where multiple Cowardin classifications are present, the Cowardin classification of the plants that constitute the uppermost layer of vegetation having 30% or greater coverage is used for the classification. In some cases, different wetland Cowardin classifications will be adjacent to each other, forming a wetland "complex."

2.1.2 WETLAND ASSESSMENT

Each delineated wetland was assessed following the Ohio Environmental Protection Agency (OEPA) *Ohio Rapid Assessment Method for Wetlands v. 5.0* (ORAM) (Mack, 2001). Wetland assessments utilized the 10-page ORAM form, providing a final Category rating for each wetland. Wetlands are rated as either a Category 1, Category 2, or Category 3 wetland, with the former being the least pristine and the latter being the most pristine.

2.2 STREAM ASSESSMENT

Streams were identified by the presence of a defined bed and bank, and evidence of an ordinary high-water mark (OHWM). The USACE defines the OHWM as “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” (David et al., 2025).

2.2.1 OEPA PRIMARY HEADWATER HABITAT ASSESSMENT

Stream assessments were conducted using the methods described in the OEPA’s Methods for Assessing Habitat in Flowing Waters: Using OEPA’s Qualitative Habitat Evaluation Index (QHEI) (Rankin, 2006) and in the OEPA’s Field Methods for Evaluating Primary Headwater Streams in Ohio (OEPA, 2020) . Streams associated with watershed area less than or equal to 1.0 square mile (259 hectares), and a maximum depth of water pools equal to, or less than 15.75 inches were evaluated utilizing the Headwater Habitat Evaluation Index (HHEI) methodology and all other streams assessed using the QHEI methodology. Flow regime (ephemeral, intermittent, perennial) was determined by the appropriate stream assessment score per OEPA manuals (OEPA, 2020) and by AECOM’s professional opinion.

Streams assessed in the Project Survey Area were reviewed for existing OEPA Aquatic Life Use Designations per OEPA’s Water Quality Standards (OAC Chapter 3745-1). Those without an existing use designation were assigned a provisional aquatic life use designation based upon habitat assessment results (Rankin, 1989; OEPA, 2020).

2.2.2 OEPA 401 WATER QUALITY CERTIFICATION FOR NATIONWIDE PERMIT ELIGIBILITY

The OEPA has designated each watershed in the state based on whether it may be ineligible for coverage under the OEPA's 401 Water Quality Certification (WQC) for USACE Nationwide Permits (NWP) (OEPA, 2021). Mapping provided by the OEPA illustrates the eligibility of streams in the area to fall under a USACE NWP for 401 certifications, or if an individual state WQC needs to be applied for with the OEPA. Impacts to streams within each watershed would then have eligibility for 401 WQC determined by the watershed category. The three categories are defined as:

Eligible: Streams within the watershed are eligible for coverage under the OEPA’s WQC for the Nationwide Permits if all other general and regional special terms and conditions are met.

Ineligible: Activities affecting high quality streams and undesignated streams draining directly to high quality streams, as represented in the map, must undergo an individual 401 WQC review process through the OEPA and do not fall under a USACE NWP.

Possibly Eligible: Additional field screening procedures are required for streams in the watershed to determine appropriate eligibility. Activities affecting undesignated streams within those Hydrologic Unit Code 12 watersheds that do not directly but eventually drain into high quality waters, might be eligible for coverage under the OEPA's 401 WQC for USACE NWPs depending on the results of a field screening assessment.

The procedures for determining individual stream eligibility in this scenario are specified in Appendix D "Stream Eligibility Determination Process" of the OEPA Ohio State Water Quality Certification of the 2021 Nationwide Permit Reauthorization.

2.2.3 UPLAND DRAINAGE FEATURES

An upland drainage feature (UDF) is a non-jurisdictional drainage that does not meet the criteria of either a jurisdictional stream or a wetland. A UDF generally lacks an OHWM (USACE, 2005) and are equivalent to a swale or an erosional feature as described by the USACE: "generally shallow features in the landscape that may convey water across upland areas during and following storm events. Swales usually occur on nearly flat slopes and typically have grass or other low-lying vegetation throughout the swale" (USACE, 2005).

A roadside ditch may also be documented as a UDF if it meets the "not potentially jurisdictional" characterization as described in the Office of Environmental Services Roadway Ditch Characterization Flowchart (Ohio Department of Transportation, 2014). This would include a ditch that originates entirely within the roadway right-of-way, has a seasonal flow regime, was not constructed to drain a wetland, and does not have hydrophytic vegetation extending more than an insignificant amount beyond its original configuration.

In addition, UDF's (including swales, ditches, and other erosional features) are generally not WOTUS except in certain circumstances, such as relocated streams.

2.3 RARE, THREATENED, AND ENDANGERED SPECIES

AECOM conducted a threatened and endangered species review and general field habitat surveys within the Project Survey Area. AECOM submitted requests to the Ohio Department of Natural Resources (ODNR) Office of Real Estate – Environmental Review Section and to the USFWS Ohio Ecological Services Field Office soliciting comments on the proposed Project. Agency-identified species of concern and available

species-specific information was reviewed to identify the various habitat types that listed species are known to inhabit.

AECOM field ecologists conducted a general habitat survey in conjunction with the stream and wetland field surveys as part of assessing potential impacts to threatened and endangered species. Land uses within the Project Survey Area were assigned a general classification based upon the principal land characteristics and vegetative cover as observed during the field surveys.

AECOM conducted a desktop assessment of the Project Survey Area and a quarter-mile buffer around it to identify potentially occurring winter bat hibernaculum that may be present near the Project. A desktop assessment with a 5 -mile buffer around the Project area, was also conducted to identify any mining activity, or karst suitable for bat hibernaculum associated with the 138kV ROW Projects which is in **Appendix A.** This assessment was conducted by reviewing data on mining activity and karst geology from the ODNR Division of Mineral Resources and USGS websites.

3.0 RESULTS

AECOM ecologists walked the Project Survey Area to conduct the wetland delineation, stream assessment, and habitat survey on December 10, 2025. During the delineation within the Project Survey Area, AECOM did not identify any wetlands or streams but did identify three Upland Drainage Features (UDF)s. The delineated features are discussed in detail in the following section.

3.1 WETLAND DELINEATION

3.1.1 PRELIMINARY SOILS EVALUATION

According to the USDA/NRCS Web Soil Survey, Licking County has a total of six soil map units identified within the Project Survey Area. Three soil map units were listed as containing hydric inclusions, and three were classified as nonhydric. Soils indicated as hydric inclusions are not predominately hydric soils and hydric soils are more likely to be found in topographic settings. **Table 1** below provides a detailed overview of all soil series and soil map units present within the Project Survey Area. Soil map units located in the Project Survey Area and vicinity are shown on **Figure 2**.

TABLE 1: SOIL MAP UNITS AND DESCRIPTIONS WITHIN THE PROJECT SURVEY AREA

Soil Series	Map Unit Symbol	Map Unit Description	Topographic Setting	Hydric	Hydric Component (%)
Delaware County					
Eldean	EIB	Eldean silt loam, 2 to 6 percent slopes	Outwash terraces, Stream terraces	No	None

TABLE 1: SOIL MAP UNITS AND DESCRIPTIONS WITHIN THE PROJECT SURVEY AREA

Soil Series	Map Unit Symbol	Map Unit Description	Topographic Setting	Hydric	Hydric Component (%)
	EIC2	Eldean silt loam, 6 to 12 percent slopes, eroded	End moraines, kames, outwash terraces, terraces, eskers, moraines	No	None
	EID2	Eldean silt loam, 12 to 18 percent slopes, eroded	End moraines, kames, outwash terraces, terraces, eskers, moraines	No	None
Minster	MnI3A	Minster silty clay loam, till substratum, 0 to 1 percent slopes	Till plains, rises on till plains	No*	Minster-Till substratum 80-95% Wallkill 0-9%
Sleeth	SIA	Sleeth silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes	Stream terraces, outwash terraces, depressions on outwash terraces	No*	Westland 0-15%
Thackery	ThB	Thackery silt loam, 2 to 6 percent slopes	Stream terraces, drainageways, outwash plains, outwash terraces	No*	Westland 5%

No* = Hydric inclusion present

3.1.2 NATIONAL WETLANDS INVENTORY MAP REVIEW

According to NWI (National Wetlands Inventory) data covering the Project location, the Project Survey Area does not contain any NWI mapped wetlands. The location of NWI mapped features identified within the vicinity of the Project are provided on **Figure 2**.

3.1.3 DELINEATED WETLANDS

During the field survey, AECOM did not identify any wetlands within the Project Survey Area.

3.2 STREAM DELINEATION

During the field survey, AECOM did not identify any streams within the Project Survey Area.

3.2.1 OEPA STREAM ELIGIBILITY

OEPA stream eligibility for 401 WQC mapping was reviewed for the Project Survey Area. The Project occurs across two watersheds, both of which were designated by 401 WQC as “ineligible” as listed in **Table 2**. The OEPA stream eligibility mapping for the Project Survey Area is provided on **Figure 4**.

TABLE 2: SUMMARY OF WATERSHED 401 WQC ELIGIBILITY WITHIN THE PROJECT SURVEY AREA

HUC-12	Watershed	401 WQC Eligibility	Number of Stream Assessments
050600011603	Town of Lockbourne-Big Walnut Creek	Ineligible	0
050600012303	Grant Run-Scioto River	Ineligible	0
		Total	**0**

3.3 FEMA 100 YEAR FLOODPLAINS

There were no FEMA regulated floodways or floodplains located within the Project Survey Area (FEMA, 2008).

3.4 PONDS

During the field survey AECOM identified one pond outside of the Project Survey Area. The extent of the pond is displayed on **Figures 2 and 3**. Photographs of the delineated pond are provided in **Appendix B**.

3.5 UPLAND DRAINAGE FEATURES

During the field surveys, AECOM identified three upland drainage features within the Project Survey Area. The extent of the upland drainage features is displayed on **Figures 2 and 3**. Photographs of all delineated upland drainage features are provided in **Appendix C**.

3.6 VEGETATIVE COMMUNITIES

AECOM ecologists conducted a general habitat survey in conjunction with the stream and wetland field surveys. As described in **Table 3** below, the Project Survey Area contained Old Field, Urban, and Landscaped Areas. Vegetative communities are depicted visually on aerial photography in **Figure 5**. Representative photographs of the vegetative communities in the Project Survey Area are provided as **Appendix D**.

TABLE 3: VEGETATIVE COMMUNITIES WITHIN THE PROJECT SURVEY AREA

Vegetative Community	Description	Approximate Acreage Within the Project Survey Area	Approximate Percentage Within the Project Survey Area
Landscaped Areas	Landscaped areas, including residential properties and commercial properties, were observed within the Project vicinity. These landscaped areas within the Project Survey Area and adjacent areas are frequently mowed grasses and forbs.	7.31	34.64%
Old Field	Herbaceous cover exists alongside roads, field borders, and abandoned fields within the Survey Area of the Project in the form of successional old-field communities. These communities are the earliest stages of recolonization by plants following disturbance. This community type is typically short-lived, giving way progressively to shrub and forest communities unless periodically re-disturbed, in which case they remain as old fields. The old-field areas within the study corridors and adjacent areas are infrequently mowed areas of grasses, forbs, and occasional shrubs.	1.78	8.44%
Urban	Urban areas are areas developed with residential and commercial land uses, including roads, buildings, and parking lots. These areas are generally devoid of significant woody and herbaceous vegetation.	12.01	56.92%
	Totals:	**21.10**	**100%**

3.7 RARE, THREATENED AND ENDANGERED SPECIES AGENCY COORDINATION

3.7.1 PROTECTED SPECIES AGENCY (CONSULTATION)

On December 15, 2025, coordination letters were sent to United States Fish and Wildlife Service (USFWS) and the Ohio Department of Natural Resources (ODNR) Ohio Natural heritage Program (ONHP) and Division of Wildlife (DOW), seeking an environmental review for the Project for potential impacts to threatened and endangered species.

Responses were received from the USFWS on December 16, 2025, and from the ODNR on January 6, 2026. According to a response letter received from the USFWS, two federally endangered, one federally proposed bat species, and one federally proposed threatened insect species were identified within range of the Project area. Regarding state threatened and endangered species that may occur within the Project vicinity, 27 species were listed by the ODNR.

Correspondence letters from the USFWS and ODNR for Cyprus Building #5 Projects are included as **Appendix E**. **Table 4** provides a list of species of concern identified by the agencies as potentially occurring within the vicinity of the Project. Photographs of the habitat within the Project area are provided as **Appendix D**.

TABLE 4: ODNR AND USFWS LISTED SPECIES WITHIN THE PROJECT SURVEY AREA

Common Name (Scientific Name)	State Status	Federal Status	Typical Habitat	Habitat Observed	Avoidance Dates	Agency Comments	Potential Impacts
Mammals							
Indiana Bat (*Myotis sodalis*)	Endangered	Endangered	Summer habitat During spring/summer, this bat species roost in trees behind loose, exfoliating bark, in crevices and cavities, or in leaves. Hibernaculum(a) During winter, this species hibernates in humid mines, caves, and occasionally	Summer habitat Within the Project Survey Area, the existing land use is composed of Urban, Oldfield, and Landscaped habitats that lacks the presence of forested areas or suitable bat roosting trees. Hibernaculum(a) No mine openings and/or known caves are located within 0.25 and 5 miles of Project area and USFWS did not identify known hibernacula within 5 miles of the Project. Desktop and initial field evaluations did not identify any potential hibernaculum(a) within the Project area. (2025 Joint Guidance)*.	Summer Tree Clearing April 1 – September 30	Summer Habitat ODNR and USFWS recommends adherence to Avoidance Dates for Tree Clearing Activities (April 1 – September 30). Hibernaculum(a) In accordance with 2025 Ohio ODNR DOW and USFWS Joint Guidance for Bat Surveys and Tree Clearing (2025 Joint Guidance) (copy of guidance provided within Appendix F), a desktop assessment for features potentially suitable as bat hibernacula was conducted and portal searches within 0.25 miles of the Project area with no features identified as potentially suitable for hibernating bats (**See Appendix A**).	Summer habitat No impact to listed bat species or their habitat is anticipated due to absence of tree clearing activities. If tree clearing is required, it should be completed between October 1 and March 31. Hibernaculum(a) No impacts to winter hibernacula were identified due to absence of caves, mines or portals within 0.25 and 5-miles of the Project. (2025 Joint Guidance)*.
Northern Long-eared Bat (*Myotis septentrionalis*)	Endangered	Endangered	Summer habitat During spring/summer, this bat species roost in trees behind loose, exfoliating bark, in crevices and cavities, or in leaves. Hibernaculum(a) During winter, this species hibernates in humid mines, caves, and occasionally man-made structures.	Summer habitat Within the Project Survey Area, the existing land use is composed of Urban, Oldfield, and Landscaped habitats that lacks the presence of forested areas or suitable bat roosting trees. Hibernaculum(a) No mine openings and/or known caves are located within 0.25 and 5 miles of Project area and USFWS did not identify known hibernacula within 5 miles of the Project. Desktop and initial field evaluations did not identify any potential hibernaculum(a) within the Project	Summer Tree Clearing April 1 – September 30	Summer Habitat ODNR and USFWS recommends adherence to Avoidance Dates for Tree Clearing Activities (April 1 – September 30). Hibernaculum(a) In accordance with 2025 Ohio ODNR DOW and USFWS Joint Guidance for Bat Surveys and Tree Clearing (2025 Joint Guidance) (copy of guidance provided within Appendix F), a desktop assessment for features potentially suitable as bat hibernacula was conducted and portal searches within 0.25 miles of the Project area with no features identified as potentially suitable for hibernating bats (**See Appendix A**).	Summer habitat No impact to listed bat species or their habitat is anticipated due to absence of tree clearing activities. If tree clearing is required, it should be completed between October 1 and March 31. Hibernaculum(a) No impacts to winter hibernacula were identified due to absence of caves, mines or portals within 0.25 and 5-miles of the Project. (2025 Joint Guidance)*.
Little brown bat (*Myotis lucifugus*)	Endangered	Under Review	The little brown bat shares similar habitat requirements as other Myotis species including the Indiana bat and northern long-eared bat. This species may roost in trees, attics, or other man-made structures during the summer season. In winter, they may hibernate in caves, mines, or man-made structures with appropriate temperature regimes.	Summer habitat Within the Project Survey Area, the existing land use is composed of Urban, Oldfield, and Landscaped habitats that lacks the presence of forested areas or suitable bat roosting trees. Hibernaculum(a) No mine openings and/or known caves are located within 0.25 and 5 miles of Project area and USFWS did not identify known hibernacula within 5 miles of the Project. Desktop and initial field evaluations did not identify any potential hibernaculum(a) within the Project Guidance)*.	Summer Tree Clearing April 1 – September 30	Summer Habitat ODNR and USFWS recommends adherence to Avoidance Dates for Tree Clearing Activities (April 1 – September 30). Additionally, the ODNR indicated that there is a known presence of this species within the Project area and summer surveys would not constitute a presence or absence of this species. Hibernaculum(a) In accordance with 2025 Ohio ODNR DOW and USFWS Joint Guidance for Bat Surveys and Tree Clearing (2025 Joint Guidance) (copy of guidance provided within Appendix F), a desktop assessment for features potentially suitable as bat hibernacula was conducted and portal searches within 0.25 miles of the Project area with no features identified as potentially suitable for hibernating bats (**See Appendix A**).	Summer habitat No impact to listed bat species or their habitat is anticipated due to absence of tree clearing activities. If tree clearing is required, it should be completed between October 1 and March 31. Additional summer surveys would not constitute presence/absence within the Project area for the little brown bat. Hibernaculum(a) No impacts to winter hibernacula were identified due to absence of caves, mines or portals within 0.25 and 5-miles of the Project. (2025 Joint Guidance)*.

TABLE 4: ODNR AND USFWS LISTED SPECIES WITHIN THE PROJECT SURVEY AREA

Common Name (Scientific Name)	State Status	Federal Status	Typical Habitat	Habitat Observed	Avoidance Dates	Agency Comments	Potential Impacts
Tricolored bat (*Perimyotis subflavus*)	Endangered	Proposed	The tricolored bat primarily roosts in trees during the summer months. During winter, this species hibernates in humid mines, caves, and occasionally man-made structures.	Summer habitat Within the Project Survey Area, the existing land use is composed of Urban, Oldfield, and Landscaped habitats that lacks the presence of forested areas or suitable bat roosting trees. Hibernaculum(a) No mine openings and/or known caves are located within 0.25 and 5 miles of Project area and USFWS did not identify known hibernacula within 5 miles of the Project. Desktop and initial field evaluations did not identify any potential hibernaculum(a) within the Project Joint Guidance)*.	Summer Tree Clearing April 1 – September 30	Summer Habitat ODNR and USFWS recommends adherence to Avoidance Dates for Tree Clearing Activities (April 1 – September 30). Hibernaculum(a) In accordance with 2025 Ohio ODNR DOW and USFWS Joint Guidance for Bat Surveys and Tree Clearing (2025 Joint Guidance) (copy of guidance provided within Appendix F), a desktop assessment for features potentially suitable as bat hibernacula was conducted and portal searches within 0.25 miles of the Project area with no features identified as potentially suitable for hibernating bats (**See Appendix A**).	Summer habitat No impact to listed bat species or their habitat is anticipated due to absence of tree clearing activities. If tree clearing is required, it should be completed between October 1 and March 31. Hibernaculum(a) No impacts to winter hibernacula were identified due to absence of caves, mines or portals within 0.25 and 5-miles of the Project. (2025 Joint Guidance)*.
Fish							
Goldeye (*Hiodon alosoides*)	Endangered	None	In Ohio, this species is found in the Ohio River and its larger tributaries, particularly the Scioto River. It prefers large rivers with turbid waters from clay silts and swift currents.	No streams were identified in the Project Survey Area.	In-Water Work March 15 – June 30	Due to the location, and there is no in-water work proposed in a perennial stream, this Project is not likely to impact this species.	No
Iowa darter (*Etheostoma exile*)	Endangered	None	In Ohio, this species is primarily found in glacially formed natural lakes. They require very clear water and abundance of dense aquatic vegetation.	No natural lakes were identified in the Project Survey Area.	In-Water Work March 15 – June 30	Due to the location, and there is no in-water work proposed in a perennial stream, this Project is not likely to impact this species.	No
Lake chubsucker (*Erimyzon sucetta*)	Threatened	None	This species is found mainly in lakes, ponds, swamps, and streams.	No suitable lakes, ponds, swamps, or streams were identified in the Project Survey Area.	In-Water Work March 15 – June 30	Due to the location, and there is no in-water work proposed in a perennial stream, this Project is not likely to impact this species.	No
Northern brook lamprey (*Ichthyomyzon fossor*)	Endangered	None	Ammocoetes (juveniles) are found burrowed beneath fine sediment in quiet waters of large streams; adults are found in fast moving waters with either sand or gravel bottoms. Typically, in headwater streams that are warm and clean.	No streams were identified in the Project Survey Area.	In-Water Work March 15 – June 30	Due to the location, and there is no in-water work proposed in a perennial stream, this Project is not likely to impact this species.	No
Paddlefish (*Polyodon spathula*)	Threatened	None	Large, free-flowing rivers; sluggish pools and backwater areas of these rivers and streams.	No streams were identified in the Project Survey Area.	In-Water Work March 15 – June 30	Due to the location, and there is no in-water work proposed in a perennial stream, this Project is not likely to impact this species.	No
Popeye shiner (*Notropis ariommus*)	Endangered	None	Found in extremely clear waters in moderate sized streams with slow to moderate flow and many long slow pools.	No streams were identified in the Project Survey Area.	In-Water Work March 15 – June 30	Due to the location, and there is no in-water work proposed in a perennial stream, this Project is not likely to impact this species.	No
Shortnose gar (*Lepisosteus platostomus*)	Endangered	None	In Ohio, this species is only found in the Ohio River and some of the larger tributaries, particularly the Scioto River. Requires large rivers, overflow ponds, backwaters and are very dependent on stagnant backwaters.	No streams were identified in the Project Survey Area.	In-Water Work March 15 – June 30	Due to the location, and there is no in-water work proposed in a perennial stream, this Project is not likely to impact this species.	No
Spotted darter (*Etheostoma maculatum*)	Endangered	None	In Ohio, this species is found in limited portions of the Scioto River drainage. They live in medium sized rivers and streams with swift currents, large boulders, or flat slabs of rocks.	No streams were identified in the Project Survey Area.	In-Water Work March 15 – June 30	Due to the location, and there is no in-water work proposed in a perennial stream, this Project is not likely to impact this species.	No

TABLE 4: ODNR AND USFWS LISTED SPECIES WITHIN THE PROJECT SURVEY AREA

Common Name (Scientific Name)	State Status	Federal Status	Typical Habitat	Habitat Observed	Avoidance Dates	Agency Comments	Potential Impacts
Tonguetied minnow (*Exoglossum laurae*)	Endangered	None	In Ohio, the species only inhabits the Great Miami and Little Miami River systems (SW Ohio). The minnow is unable to live in murky waters, requires a gravel and pebble stream bottom, a forested riverbank and cool water temperatures to survive.	Project is outside the Great Miami and Little Miami River system.	In-Water Work March 15 – June 30	Due to the location, and there is no in-water work proposed in a perennial stream, this Project is not likely to impact this species.	No
Mussels							
Clubshell (*Pleurobema clava*)	Endangered	Endangered	Perennial Streams	No streams were identified in the Project Survey Area.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Elephant-ear (*Elliptio crassidens crassidens*)	Endangered	None	Perennial Streams	No streams were identified in the Project Survey Area.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Long solid (*Fusconaia subrotunda*)	Endangered	None	Perennial Streams	No streams were identified in the Project Survey Area.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Northern riffleshell (*Epioblasma torulosa rangiana*)	Endangered	Endangered	Perennial Streams	No streams were identified in the Project Survey Area.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Ohio pigtoe (*Pleurobema cordatum*)	Endangered	None	Perennial Streams	No streams were identified in the Project Survey Area.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Pocketbook (*Lampsilis ovata*)	Endangered	None	Perennial Streams	No streams were identified in the Project Survey Area.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Pondhorn (*Uniomerus tetralasmus*)	Threatened	None	Perennial Streams	No streams were identified in the Project Survey Area.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Purple cat's paw (*Epioblasma obliquata*)	Endangered	Endangered	Perennial Streams	No streams were identified in the Project Survey Area.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Rabbitsfoot (*Theliderma cylindrica*)	Threatened	Threatened	Perennial Streams	No streams were identified in the Project Survey Area.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Rayed bean (*Villosa fabalis*)	Endangered	Endangered	Perennial Streams	No streams were identified in the Project Survey Area.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No

TABLE 4: ODNR AND USFWS LISTED SPECIES WITHIN THE PROJECT SURVEY AREA

Common Name (Scientific Name)	State Status	Federal Status	Typical Habitat	Habitat Observed	Avoidance Dates	Agency Comments	Potential Impacts
Salamander mussel (*Simpsonaias ambigua*)	Threatened	None	Perennial Streams	No streams were identified in the Project Survey Area.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Snuffbox (*Epioblasma triquetra*)	Endangered	Endangered	Perennial Streams	No streams were identified in the Project Survey Area.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Washboard (*Megalonaias nervosa*)	Endangered	None	Perennial Streams	No streams were identified in the Project Survey Area.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Birds							
Sandhill Crane (*Antigone canadensis*)	Threatened	None	This species utilizes areas of large, expansive wetlands, wet meadows, shallow marshes, and bogs.	Based on desktop and field reviews, the Project Survey Area does not consist of any large tract meadows, shallow marshes or bogs. No potential suitable habitat was observed for this species	April 1 through August 31	ODNR stated that if grassland, prairie, or wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period April 1 through August 31.	No potentially suitable habitat was observed with the Project Survey Area.
Insects							
Monarch Butterfly (*Danaus plexippus plexippus*)	None	Proposed	This species uses fields, urban gardens, roadside areas, and/or areas where milkweed and flowers with nectar are available.	Based on field reviews, the Project area contains habitat that may be suitable to this species.	N/A	The monarch butterfly is currently proposed for listing within the ESA and is not a regulated species. No further action is warranted.	Where feasible and permissible with existing land uses, AEP will use native species mixes.

*2025 Joint Guidance – Refers to the 2025 ODNR DOW and USFWS Joint Guidance for Bat Surveys and Tree Clearing, a copy of the guidance is provided as **Appendix F**.

3.7.2 PROTECTED SPECIES AGENCY SUMMARY

Based on general observations during the ecological field survey, no forested areas were identified within the Project Survey Area. If tree clearing were to become part of the Project scope of work, the ODNR and the USFWS recommends implementations of seasonal tree clearing between October 1 and March 31 to avoid adverse effects to Indiana bat, northern long-eared bat, little brown bat, and tricolored bat. If trees must be cut during the summer months, the ODNR recommends that a mist net survey could be completed for the Indiana bat, northern long eared bat, and the tricolored bat between June 1 and August 15. However, additional summer surveys would not constitute a presence/absence within the Project Survey Area for the little brown bat.If summer tree clearing is needed, additional coordination will be completed with the ODNR and the USFWS.

The project is within the vicinity of records for the little brown bat (*Myotis lucifugus*), a state endangered species. Because presence of state endangered bat species has been established in the area, summer tree clearing is not recommended, and additional summer surveys would not constitute presence/absence in the area. However, limited summer tree clearing inside the Project Survey Area may be acceptable after further consultation with DOW.

Regarding potential hibernaculum(a) within the Project area, a desktop hibernaculum(a) review was completed in accordance with the 2025 Ohio ODNR DOW and USFWS Joint Guidance for Bat Surveys and Tree Clearing within 0.25 and 5 miles of the Project area (**Appendix F**). No karst, underground mine openings, or surface industrial minerals are present within a 0.25- or 5-mile radius of the Project area, and the Project is not anticipated to provide suitable hibernacula for cave-dwelling bats. The location of any potential hibernacula is provided as **Appendix A**. As per the ODNR response, if a potential or known hibernaculum is found, the DOW recommends a 0.25-mile permanent tree clearing buffer around the hibernaculum entrance. Limited summer or winter tree clearing may be acceptable after consultation with the DOW (**Appendix E**).

No impacts are anticipated to occur to any fish species or mussel species as no in-water work is proposed as part of the Project.

The ODNR provided guidance that sandhill cranes are a wetland-dependent species that utilize shallow, standing water or moist bottomlands for roosting. For breeding, they require a large tract of wet meadow, shallow marsh, or bog. Any construction that could impact these areas should be avoided through the birds' nesting period of April 1 through August 31. The Project Survey Area encompasses a segment of an existing transmission line corridor that runs through a highly developed industrial area with the city of Columbus. The landscape surrounding this area is characterized by dense commercial and industrial developments. No surface water or wetlands were documented during the field survey. Due to the absence of large tract wet meadows, shallow marshes or bogs, no suitable nesting habitat for the sandhill crane was identified

within the Project Survey Area. Due to the absence of habitat within the Project Survey Area, no further coordination with the ODNR is warranted.

4.0 SUMMARY

The ecological field survey of the Project Survey Area did not identify any wetlands or streams within the Project Survey Area. However, three UDFs were identified within the Project Survey Area.

The reported results of the ecological survey conducted by AECOM on this Project are limited to the areas within the Project Survey Area provided in **Figure 3**. Areas that fall outside of the Project Survey Area were not evaluated in the field and are not included in the reporting of this survey.

Of the 28 state and/or federally listed threatened, endangered, or species of concern within range of the Project Survey Area, no habitat for any of the listed aquatic, bird or mammal species were identified within the Project Survey Area. If tree clearing cannot be completed during the seasonal tree clearing restriction (October 1 to March 31), further coordination with the ODNR/USFWS is warranted. Additionally, the little brown bat was identified as a known occurrence and additional summer surveys would not constitute a presence/absence for this species.

The field survey results presented herein apply to the existing and reasonably foreseeable site conditions at the time of our assessment. They cannot apply to site changes of which AECOM is unaware and has not had the opportunity to review. Changes in the condition of a property may occur with time due to natural processes or human impacts at the Project site or on adjacent properties. Changes in applicable standards may also occur as a result of legislation or the expansion of knowledge over time. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond the control of AECOM.

5.0 REFERENCES

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FIGURES

Southwest Columbus

Southeast Columbus

Commercial Point

AEP Hartman Farm Ext #2 Install
39.85575428
-82.99218199

AEP Hartman Ext. #3 Modify
39.85573617
-82.99184442

AEP Hartman Farm Ext #2 Install
39.85202374
-82.99802112

AEP Hartman Ext. #3 Modify
39.84926251
-82.99712252

CITY OF OBETZ

CITY OF COLUMBUS

FRANKLIN COUNTY

Lockbourne

JACKSON TOWNSHIP

HAMILTON TOWNSHIP

CITY OF GROVE CITY

PROJECT LOCATION

FRANKLIN COUNTY, OHIO

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: LOCKBOURNE, OHIO, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND USGS, ACCESSED 01/2026.

1/23/2026

LEGEND

- AEP HARTMAN FARM EXT #2 INSTALL TRANSMISSION LINE
- AEP HARTMAN EXT. #3 MODIFY TRANSMISSION LINE
- HARTMAN FARM EXT #2 INSTALL PROJECT AREA
- HARTMAN EXT. #3 MODIFY PROJECT AREA
- COUNTY BOUNDARIES
- TOWNSHIP BOUNDARIES
- MUNICIPAL BOUNDARIES
- OHIO USGS 7.5' TOPOGRAPHIC QUADRANGLE

0 1,000 2,000 4,000 Feet

FIGURE 1
PROJECT LOCATION MAP

AECOM

AEP HARTMAN FARM EXT #2 INSTALL AND
HARTMAN EXT #3 MODIFY
AMERICAN ELECTRIC POWER

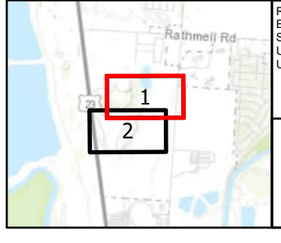
AMERICAN ELECTRIC POWER

DRAWN BY: GIB DATE: 1/23/2026
CHECKED: CJT APPROVED:

\\na.aecomnet.com\lfs\AMER\Cincinnati-USCNC02\DCS\GIS\ArcMap_GeoDB_Projects\ENV\60770770_AEP_HartmanFarmExt2_CyprusB5\2_MXDs\1_WDR\AEP_HartmanFarmExt_2_3_CyprusB5_WDR_Figures.aprx

No wetlands or streams were delineated within the Project Survey Area.

EID2
EIC2
OcB
ThB
OcC2
Cc
PUBGx
EID2
EIB
OcC2
OcB
Str. Cyprus
CYPRUS STATION
SlA
Parsons Ave
Str. Cyprus
Str. 1.2
Mnl3A
Str. 4.2
Str. 3.2
Str. 2.2
UDF-WRL-003
Str. 5.2
FRANKLIN COUNTY
HAMILTON TOWNSHIP
050600012303
Grant Run-Scioto River
EID2
EIC2
Str. 1.3x
EID2
UDF-WRL-002
Str. 5.3x
Str. 4.3x
Str. 3.3x
Str. 2.3x
EIB
UDF-WRL-001
P-WRL-001
050600011603
Town of Lockbourne-Big Walnut Creek
Str. 6.2
ThB
OcB
ThA
EIB
Str. 6.3x
EID2
EIC2



REFERENCE: WORLD IMAGERY (CLARITY), ESRI, ARCGIS ONLINE, ACCESSED 01/2026. SOIL SURVEY GEOGRAPHIC (SSURGO), USDA/NRCS, 2024. NHD, USGS 2024. NWI, USFWS 2024. HUC 12, USGS 2024.

1/23/2026

LEGEND

- EXISTING STRUCTURE
- PROPOSED STRUCTURE
- AEP STATION
- AEP HARTMAN FARM EXT #2 INSTALL TRANSMISSION LINE
- AEP HARTMAN EXT. #3 MODIFY TRANSMISSION LINE
- HARTMAN FARM EXT #2 INSTALL PROJECT AREA
- HARTMAN EXT. #3 MODIFY PROJECT AREA
- CULVERT
- DELINEATED POND
- DELINEATED UPLAND DRAINAGE FEATURE
- NWI WETLAND (USFWS)
- NHD WATERBODY (USGS)
- HUC 12 WATERSHED BOUNDARY
- COUNTY BOUNDARIES
- TOWNSHIP BOUNDARIES
- SOILS

ELB: ELDEAN SILT LOAM, 2 TO 6 PERCENT SLOPES

ELC2: ELDEAN SILT LOAM, 2 TO 6 PERCENT SLOPES

ELD2: ELDEAN SILT LOAM, 2 TO 6 PERCENT SLOPES

MNL3A: MINSTER SILTY CLAY LOAM, TILL SUBSTRATUM, 0 TO 1 PERCENT SLOPES

SLA: SLEETH SILT LOAM, SOUTHERN OHIO TILL PLAIN, 0 TO 2 PERCENT SLOPES

THB: THACKERY SILT LOAM, 2 TO 6 PERCENT SLOPES

0 100 200 400 Feet

FIGURE 2
SOIL MAP AND
NATIONAL WETLANDS INVENTORY MAP
SHEET 1 of 2

AECOM

AEP HARTMAN FARM EXT #2 INSTALL AND
HARTMAN EXT #3 MODIFY
AMERICAN ELECTRIC POWER

DRAWN BY: GIB
CHECKED: CJT
DATE: 1/23/2026
APPROVED:

\\na.aecomnet.com\lfs\AMER\Cincinnati-USCNC02\DCS\GIS\ArcMap_GeoDB_Projects\ENV\60770770_AEP_HartmanFarmExt2_CyprusB5\2_MXDs\1_WDR\AEP_HartmanFarmExt_2_3_CyprusB5_WDR_Figures.aprx

No wetlands or streams were delineated within the Project Survey Area.

Str. 6.3x
Str. 7.2
Str. Buiding 5 N.
Str. 7.3x
Str. Building 5 S.
Str. 8.3x
Str. 9.3x

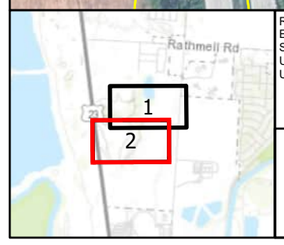
EID2
EIC2
ThA
EIB
ThB
OcC2
SlA
OcB
Wd

US-23 S
S High St
US-23 N

050600012303
Grant Run-Scioto River

050600011603
Town of Lockbourne-Big Walnut Creek

HAMILTON TOWNSHIP
FRANKLIN COUNTY



REFERENCE: WORLD IMAGERY (CLARITY), ESRI, ARCGIS ONLINE, ACCESSED 01/2026. SOIL SURVEY GEOGRAPHIC (SSURGO), USDA/NRCS, 2024. NHD, USGS 2024. NWI, USFWS 2024. HUC 12, USGS 2024.

1/23/2026

LEGEND

- EXISTING STRUCTURE
- PROPOSED STRUCTURE
- AEP HARTMAN FARM EXT #2 INSTALL TRANSMISSION LINE
- AEP HARTMAN EXT. #3 MODIFY TRANSMISSION LINE
- HARTMAN FARM EXT #2 INSTALL PROJECT AREA
- HARTMAN EXT. #3 MODIFY PROJECT AREA
- HUC 12 WATERSHED BOUNDARY
- COUNTY BOUNDARIES
- TOWNSHIP BOUNDARIES
- SOILS

ELB: ELDEAN SILT LOAM, 2 TO 6 PERCENT SLOPES
ELC2: ELDEAN SILT LOAM, 2 TO 6 PERCENT SLOPES
ELD2: ELDEAN SILT LOAM, 2 TO 6 PERCENT SLOPES
THB: THACKERY SILT LOAM, 2 TO 6 PERCENT SLOPES

0 100 200 400 Feet

FIGURE 2
SOIL MAP AND
NATIONAL WETLANDS INVENTORY MAP
SHEET 2 of 2

AECOM

AEP HARTMAN FARM EXT #2 INSTALL AND
HARTMAN EXT #3 MODIFY
AMERICAN ELECTRIC POWER

DRAWN BY: GIB
CHECKED: CJT
DATE: 1/23/2026
APPROVED:

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No wetlands or streams were delineated within the Project Survey Area.

PUBGx

Str. Cyprus

CYPRUS STATION

Str. Cyprus

Str. 1.2

Str. 2.2

Str. 3.2

Str. 4.2

Str. 5.2

UDF-WRL-003

Str. 1.3x

FRANKLIN COUNTY

HAMILTON TOWNSHIP

050600012303
Grant Run-Scioto River

Parsons Ave

UDF-WRL-002

Str. 5.3x

Str. 4.3x

Str. 3.3x

Str. 2.3x

UDF-WRL-001

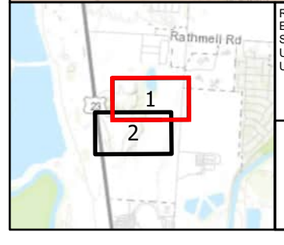
P-WRL-001

P-WRL-001

050600011603
Town of Lockbourne-Big Walnut Creek

Str. 6.2

Str. 6.3x



REFERENCE: WORLD IMAGERY (CLARITY), ESRI, ARCGIS ONLINE, ACCESSED 01/2026. SOIL SURVEY GEOGRAPHIC (SSURGO), USDA/NRCS, 2024. NHD, USGS 2024. NWI, USFWS 2024. HUC 12, USGS 2024.

1/23/2026

LEGEND

- EXISTING STRUCTURE
- PROPOSED STRUCTURE
- AEP STATION
- CULVERT
- DELINEATED UPLAND DRAINAGE FEATURE
- AEP HARTMAN FARM EXT #2 INSTALL TRANSMISSION LINE
- AEP HARTMAN EXT. #3 MODIFY TRANSMISSION LINE
- DELINEATED POND
- HARTMAN FARM EXT #2 INSTALL PROJECT AREA
- HARTMAN EXT. #3 MODIFY PROJECT AREA
- NWI WETLAND (USFWS)
- NHD WATERBODY (USGS)
- HUC 12 WATERSHED BOUNDARY
- COUNTY BOUNDARIES
- TOWNSHIP BOUNDARIES
- CONTOURS (10FT)

0 100 200 400 Feet

FIGURE 3
WETLAND DELINEATION AND STREAM ASSESSMENT MAP
SHEET 1 of 2

AECOM

AEP HARTMAN FARM EXT #2 INSTALL AND
HARTMAN EXT #3 MODIFY
AMERICAN ELECTRIC POWER

DRAWN BY: GIB
CHECKED: CJT

DATE: 1/23/2026
APPROVED:

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No wetlands or streams were delineated within the Project Survey Area.

Str. 6.3x

Str. 7.2

Str. Buiding 5 N.

Str. 7.3x

Str. Building 5 S.

Str. 8.3x

Str. 9.3x

FRANKLIN COUNTY

HAMILTON TOWNSHIP

050600011603
Town of Lockbourne-Big Walnut Creek

050600012303
Grant Run-Scioto River

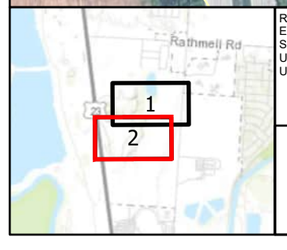
050600012303
Grant Run-Scioto River

S High St

US-23 N

US-23 S

S High St



REFERENCE: WORLD IMAGERY (CLARITY), ESRI, ARCGIS ONLINE, ACCESSED 01/2026. SOIL SURVEY GEOGRAPHIC (SSURGO), USDA/NRCS, 2024. NHD, USGS 2024. NWI, USFWS 2024. HUC 12, USGS 2024.

1/23/2026

LEGEND

- EXISTING STRUCTURE
- PROPOSED STRUCTURE
- AEP HARTMAN FARM EXT #2 INSTALL TRANSMISSION LINE
- AEP HARTMAN EXT. #3 MODIFY TRANSMISSION LINE
- HARTMAN FARM EXT #2 INSTALL PROJECT AREA
- HARTMAN EXT. #3 MODIFY PROJECT AREA
- HUC 12 WATERSHED BOUNDARY
- COUNTY BOUNDARIES
- TOWNSHIP BOUNDARIES
- CONTOURS (10FT)

0 100 200 400 Feet

FIGURE 3
WETLAND DELINEATION AND STREAM ASSESSMENT MAP
SHEET 2 of 2

AECOM

AEP HARTMAN FARM EXT #2 INSTALL AND HARTMAN EXT #3 MODIFY
AMERICAN ELECTRIC POWER

DRAWN BY: GIB
CHECKED: CJT
DATE: 1/23/2026
APPROVED:

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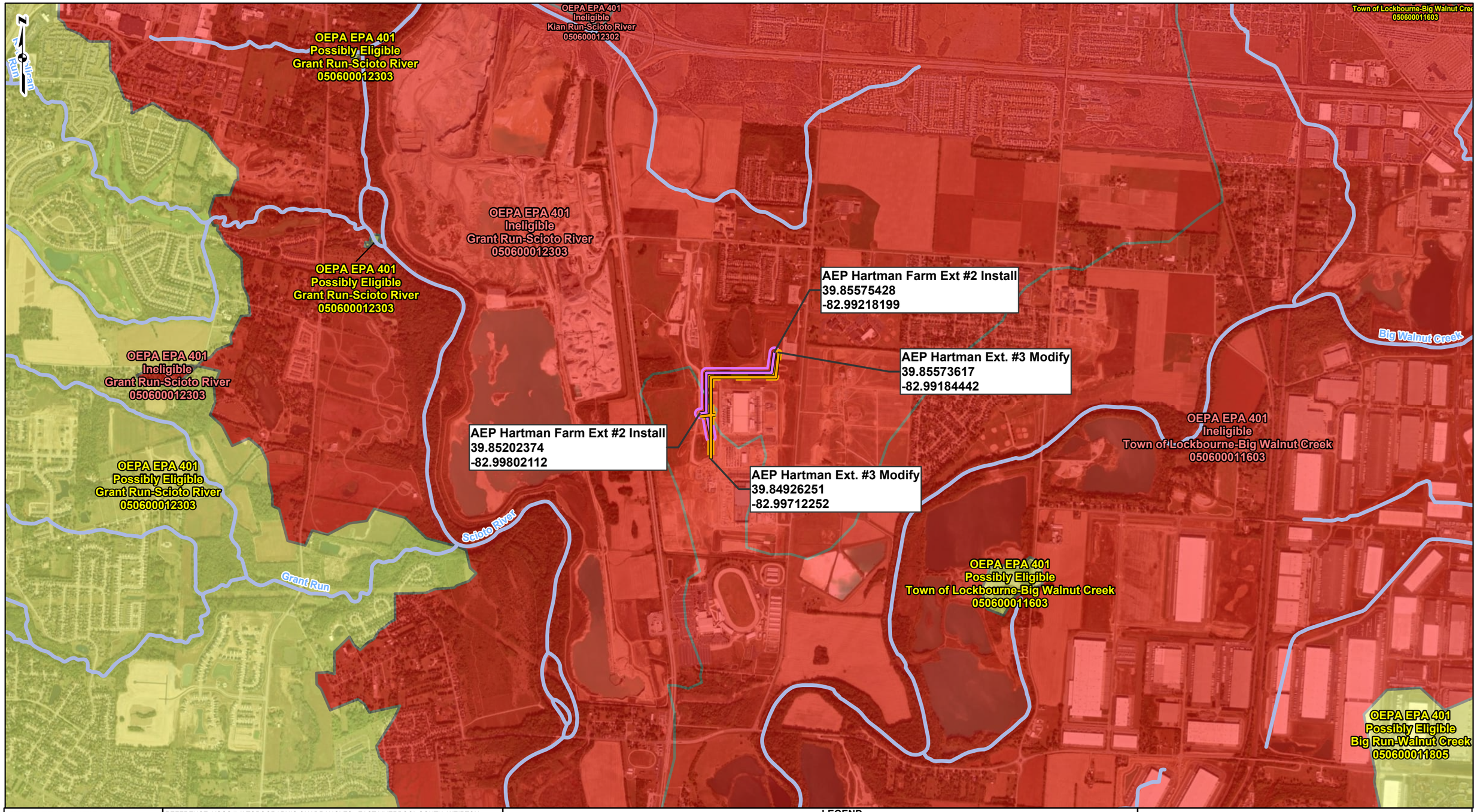

PROJECT LOCATION

FRANKLIN COUNTY, OHIO

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: EAST LIVERPOOL SOUTH, WEIRTON, KNOXVILLE, STEUBENVILLE EAST, WELLSVILLE AND STEUBENVILLE WEST, OHIO, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND USGS, ACCESSED 01/2026. OEPA ELIGIBLE WATERSHEDS, OHIO ENVIRONMENTAL PROTECTION AGENCY, 2024.

1/23/2026

LEGEND

- HARTMAN FARM EXT #2 INSTALL PROJECT AREA
- HARTMAN EXT. #3 MODIFY PROJECT AREA
- AEP HARTMAN FARM EXT #2 INSTALL TRANSMISSION LINE
- AEP HARTMAN EXT. #3 MODIFY TRANSMISSION LINE
- NHD STREAM (USGS)

OEPA ELIGIBILITY:

- INELIGIBLE
- POSSIBLY ELIGIBLE

0 1,000 2,000 4,000 Feet

FIGURE 4
STREAM ELIGIBILTY MAP

AECOM

AEP HARTMAN FARM EXT #2 INSTALL AND
HARTMAN EXT #3 MODIFY
AMERICAN ELECTRIC POWER

DRAWN BY: GIB DATE: 1/23/2026
CHECKED: CJT APPROVED:

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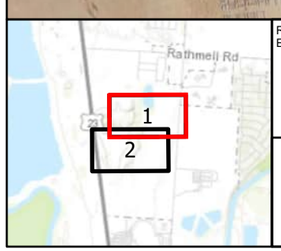
PH-1

PH-2

PH-3

PH-4



REFERENCE: WORLD IMAGERY (CLARITY), ESRI, ARCGIS ONLINE, ACCESSED 01/2026.

1/23/2026

LEGEND

- PHOTO LOCATION POINT
- HARTMAN FARM EXT #2 INSTALL PROJECT AREA
- HARTMAN EXT. #3 MODIFY PROJECT AREA

VEGETATIVE COMMUNITY TYPE

- LANDSCAPED
- OLD FIELD
- URBAN

0 100 200 400 Feet

FIGURE 5
VEGETATIVE COMMUNITIES ASSESSMENT MAP
SHEET 1 of 2

AECOM

AEP HARTMAN FARM EXT #2 INSTALL AND HARTMAN EXT #3 MODIFY
AMERICAN ELECTRIC POWER

DRAWN BY: GIB DATE: 1/23/2026
CHECKED: CJT APPROVED:

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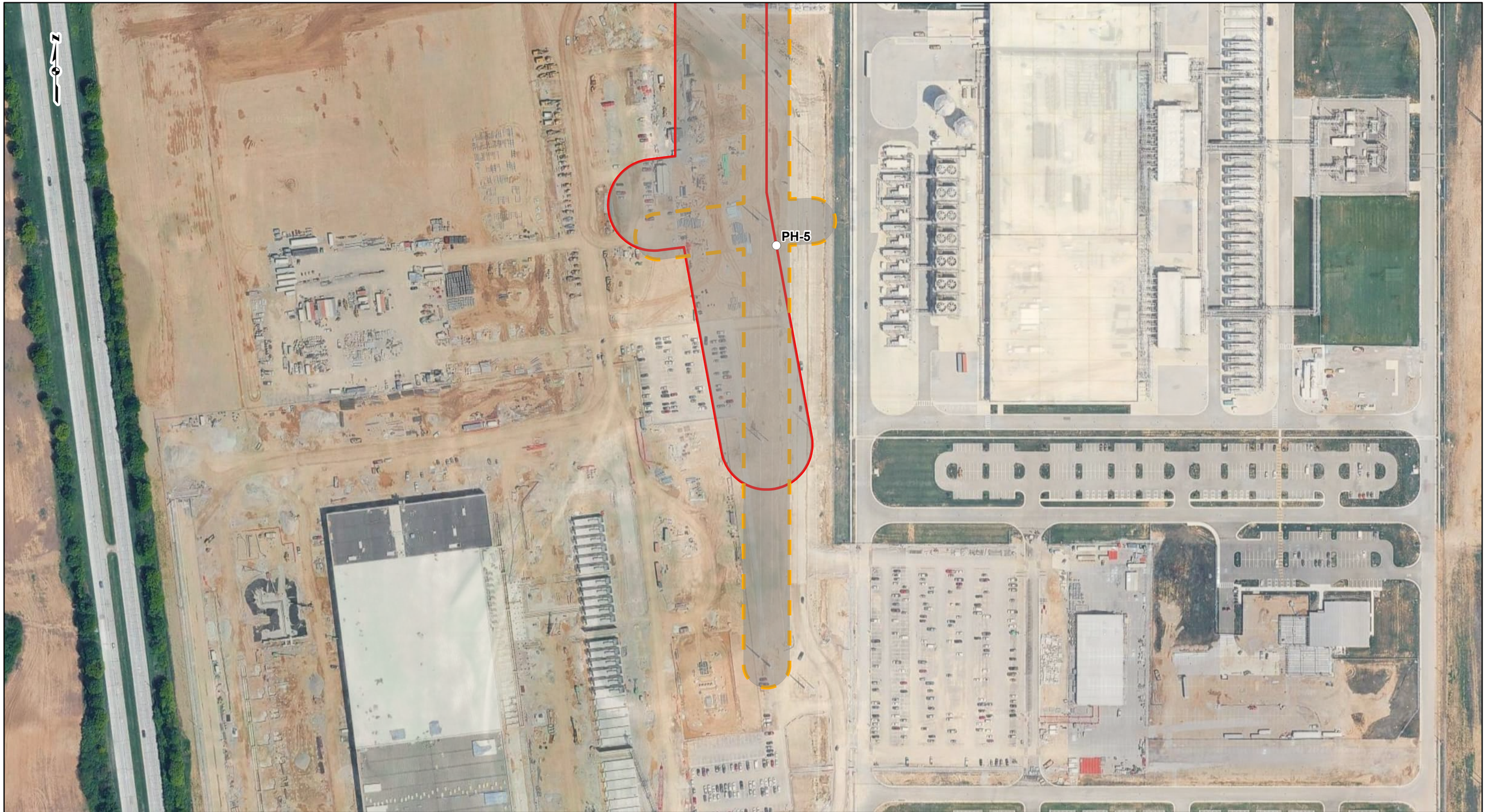

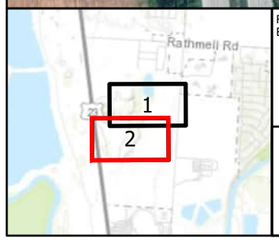

REFERENCE: WORLD IMAGERY (CLARITY), ESRI, ARCGIS ONLINE, ACCESSED 01/2026.

1/23/2026

LEGEND

- PHOTO LOCATION POINT
- HARTMAN FARM EXT #2 INSTALL PROJECT AREA
- HARTMAN EXT. #3 MODIFY PROJECT AREA

VEGETATIVE COMMUNITY TYPE

- URBAN

0 100 200 400 Feet

FIGURE 5
VEGETATIVE COMMUNITIES ASSESSMENT MAP
SHEET 2 of 2

AECOM

AEP HARTMAN FARM EXT #2 INSTALL AND
HARTMAN EXT #3 MODIFY
AMERICAN ELECTRIC POWER

DRAWN BY: GIB DATE: 1/23/2026
CHECKED: CJT APPROVED:

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APPENDIX A

DESKTOP ASSESSMENT FOR WINTER BAT HABITAT

No features are within the 5.0-mile buffer. The closest feature is 6.5 miles west of the Project area.

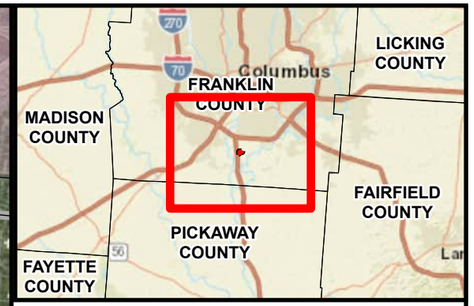
PROJECT SURVEY AREA
39.85202
-82.99802

Southeast Columbus
Southwest Columbus
Reynoldsburg
Commercial Point
Lockbourne
Canal Winchester
Galloway
Harrisburg

CITY OF COLUMBUS
CITY OF URBANCREST
CITY OF GROVE CITY
CITY OF OBETZ
CITY OF GROVEPORT
CITY OF COMMERCIAL POINT
CITY OF LOCKBOURNE

FRANKLIN TOWNSHIP
JACKSON TOWNSHIP
PRAIRIE TOWNSHIP
URBAN TOWNSHIP
HAMILTON TOWNSHIP
TRURO TOWNSHIP
MADISON TOWNSHIP
PLEASANT TOWNSHIP
SCIOTO TOWNSHIP
HARRISON TOWNSHIP

FRANKLIN COUNTY
PICKAWAY COUNTY



LEGEND

- 0.25 Mile Review Area
- 5 Mile Review Area
- Project Survey Area
- Underground Mine Extents
- Industrial Minerals Mining Operation
- Silurian- and Devonian-age carbonate bedrock overlain by less than 20 feet of glacial drift and/or alluvium
- Silurian- and Devonian-age carbonate bedrock overlain by more than 20 feet of glacial drift and/or alluvium
- Municipal Boundaries
- Township Boundary
- County Boundary
- Ohio USGS 7.5' Topographic Quadrangle

N

0 3,000 6,000 12,000
Feet

Cyprus Building No. 5 Projects:
Hartman Farm Ext #2 and Hartman Ext #3 Modify

APPENDIX A
Desktop Assessment for Winter Bat Habitat

DATE: 12/15/2025	1:72,000
CREATED BY: GIB	CHECKED BY: CJT
JOB NO.: 60770770/ 60770783	AECOM

Date Saved: 12/15/2025
Document Path: \\na.aecomnet.com\ifs\AMER\Cincinnati-USCNC02\DCS\GIS\ArcMap_GeoDB_Projects\ENV\60770770_AEP_HartmanFarmExt2_CyprusB5\2_MXDs\0_TE\AEP_HartmanFarmExt_2_3_CyprusB5_TE_FiguresAEP_HartmanFarmExt_2_3_CyprusB5_TE_Figures.aprx

APPENDIX B

POND PHOTOGRAPHIC RECORD

AECOM Imagine it. Delivered.

PHOTOGRAPHIC RECORD

Pond Photographic Record

Client Name:	Site Location:	Project No.
AEP Ohio Transco	Hartman Farm Ext #2 Install and Hartman Ext #3 Modify	60770770, 60770783

P-WRL-001

Date:

12/10/2025

Description:

Storm Water Basin

Facing South

APPENDIX C

UPLAND DRAINAGE FEATURES PHOTOGRAPHIC RECORD

AECOM Imagine it. Delivered.

PHOTOGRAPHIC RECORD

Upland Drainage Feature Photographic Record

Client Name:	Site Location:	Project No.
AEP Ohio Transco	Hartman Farm Ext #2 Install and Hartman Ext #3 Modify	60770770, 60770783

UDF-WRL-001	
Date: 12/10/2025	
Description: Upland Drainage Feature Facing Upstream	

UDF-WRL-001	
Date: 12/10/2025	
Description: Upland Drainage Feature Facing Downstream	

AECOM Imagine it. Delivered.

PHOTOGRAPHIC RECORD

Upland Drainage Feature Photographic Record

Client Name:	Site Location:	Project No.
AEP Ohio Transco	Hartman Farm Ext #2 Install and Hartman Ext #3 Modify	60770770, 60770783

UDF-WRL-001 **Date:** 12/10/2025 **Description:** Upland Drainage Feature Facing Substrate	

UDF-WRL-002 **Date:** 12/10/2025 **Description:** Upland Drainage Feature Facing Upstream	

AECOM Imagine it. Delivered.

PHOTOGRAPHIC RECORD

Upland Drainage Feature Photographic Record

Client Name:	Site Location:	Project No.
AEP Ohio Transco	Hartman Farm Ext #2 Install and Hartman Ext #3 Modify	60770770, 60770783

UDF-WRL-002 **Date:** 12/10/2025 **Description:** Upland Drainage Feature Facing Downstream	

UDF-WRL-002 **Date:** 12/10/2025 **Description:** Upland Drainage Feature Facing Substrate	

AECOM Imagine it. Delivered.

PHOTOGRAPHIC RECORD

Upland Drainage Feature Photographic Record

Client Name:	Site Location:	Project No.
AEP Ohio Transco	Hartman Farm Ext #2 Install and Hartman Ext #3 Modify	60770770, 60770783

UDF-WRL-003 **Date:** 12/10/2025 **Description:** Upland Drainage Feature Facing Upstream	

UDF-WRL-003 **Date:** 12/10/2025 **Description:** Upland Drainage Feature Facing Downstream	

AECOM Imagine it. Delivered.

PHOTOGRAPHIC RECORD

Upland Drainage Feature Photographic Record

Client Name:	Site Location:	Project No.
AEP Ohio Transco	Hartman Farm Ext #2 Install and Hartman Ext #3 Modify	60770770, 60770783

UDF-WRL-003	
Date: 12/10/2025	
Description: Upland Drainage Feature Facing Substrate	

APPENDIX D

HABITAT PHOTOGRAPHIC RECORD

AECOM Imagine it. Delivered.

PHOTOGRAPHIC RECORD

Habitat Photographic Record

Client Name:	Site Location:	Project No.
AEP Ohio Transco	Hartman Farm Ext #2 Install and Hartman Ext #3 Modify	60770770, 60770783

PH-01	
Date: 12/10/2025	
Description: Landscaped Facing South	

PH-02	
Date: 12/10/2025	
Description: Old Field Facing East	

AECOM Imagine it. Delivered.

PHOTOGRAPHIC RECORD

Habitat Photographic Record

Client Name:	Site Location:	Project No.
AEP Ohio Transco	Hartman Farm Ext #2 Install and Hartman Ext #3 Modify	60770770, 60770783

PH-03	
Date: 12/10/2025	
Description: Old Field Facing West	

PH-04	
Date: 12/10/2025	
Description: Urban Facing South	

AECOM Imagine it. Delivered.

PHOTOGRAPHIC RECORD

Habitat Photographic Record

Client Name:	Site Location:	Project No.
AEP Ohio Transco	Hartman Farm Ext #2 Install and Hartman Ext #3 Modify	60770770, 60770783

PH-05

Date:

12/10/2025

Description:

Urban

Facing North

APPENDIX E

AGENCY CORRESPONDENCE

Department of Natural Resources
ohiodnr.gov

Mike DeWine, *Governor*
Jim Tressel, *Lt. Governor*
Mary Mertz, *Director*

Office of Real Estate & Land Management
Tara Paciorek - Chief
2045 Morse Road – E-2
Columbus, Ohio 43229-6693

January 6, 2026

Eric Norman
AECOM
436 Seventh Avenue, Suite 1200
Pittsburgh, Pennsylvania 15219

Re: 25-1968_Hartman Farm

Project: The proposed project involves the construction of a double circuit 138 kilovolt line as well as the reconfiguration of the feed to Building 5 and modification of the feed to Building 4.

Location: The proposed project is located in Hamilton Township, Franklin County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state, or federal agency nor relieve the applicant of the obligation to comply with any local, state, or federal laws or regulations.

Natural Heritage Database: The Natural Heritage Database has the following data within one mile of the project area:

Tippecanoe Darter (*Etheostoma tippecanoe*), SC

Conservation status abbreviations are as follows: E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; SI = state special interest; U = state status under review; X = presumed extirpated in Ohio; FE = federally endangered, and FT = federally threatened. The review was performed on the specified project area as well as an additional one-mile radius. Records searched date from 1980. Features searched include locations of rare and endangered plants and animals determined to be of value to the conservation of their species, high quality plant communities, animal breeding assemblages, and outstanding geological features.

The species listed above is not recorded within one-half mile of the boundaries of the specified project area. Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for an area is not a statement that rare species or unique features are absent from that area.

Fish and Wildlife: The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that Best Management Practices be utilized to minimize erosion and sedimentation.

The project is within the vicinity of records for the little brown bat (*Myotis lucifugus*), a state endangered species. Because presence of state endangered bat species has been established in the area, summer tree clearing is not recommended, and additional summer surveys would not constitute presence/absence in the area. However, limited summer tree clearing inside this buffer may be acceptable after further consultation with DOW (contact Eileen Wyza at Eileen.Wyza@dnr.ohio.gov).

In addition, the entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally endangered species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these bat species predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in clusters of dead leaves on tree limbs. However, these species are also dependent on the forest structure surrounding roost trees. The DOW recommends tree and/or tree limb clearing only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with a Diameter Breast Height (DBH) ≥ 20" if possible.

For every project, the DOW also recommends that a winter bat habitat assessment is conducted to determine if potential hibernacula are present within the project area. This is to limit possible disturbances that seasonal tree clearing and/or subsurface work (e.g., trenching, blasting, etc.) may cause to hibernating bats. Potential hibernacula include rocky outcroppings, caves, and underground mines. Direction on how to conduct winter habitat assessments can be found in the joint guidance OHIO DIVISION OF WILDLIFE AND U.S. FISH AND WILDLIFE SERVICE (OH-FIELD OFFICE) JOINT GUIDANCE FOR BAT SURVEYS. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile permanent tree clearing buffer around the hibernaculum entrance. Limited summer or winter tree clearing may be acceptable after consultation with the DOW. If a habitat assessment for projects involving subsurface disturbance finds that a potential hibernaculum is present within 5 miles of the project area, please consult with Eileen Wyza for project recommendations. If no tree clearing or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

The project is within the range of the following listed mussel species.
Federally Endangered
clubshell (*Pleurobema clava*)
rayed bean (*Villosa fabalis*)
northern riffleshell (*Epioblasma torulosa rangiana*)
snuffbox (*Epioblasma triquetra*)
purple cat's paw (*Epioblasma obliquata*)

Federally Threatened
rabbitsfoot (*Theliderma cylindrica*)

State Endangered
elephant-ear (*Elliptio crassidens crassidens*)
pocketbook (*Lampsilis ovata*)
long solid (*Fusconaia subrotunda*)
washboard (*Megalonaias nervosa*)
Ohio pigtoe (*Pleurobema cordatum*)

State Threatened
pondhorn (*Uniomerus tetralasmus*)
Salamander Mussel (*Simpsonaias ambigua*)

Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact these species.

The project is within the range of the following listed fish species.
State Endangered
goldeye (*Hiodon alosoides*)
shortnose gar (*Lepisosteus platostomus*)
Iowa darter (*Etheostoma exile*)
spotted darter (*Etheostoma maculatum*)
northern brook lamprey (*Ichthyomyzon fossor*)
tonguetied minnow (*Exoglossum laurae*)
popeye shiner (*Notropis ariommus*)

State Threatened
lake chubsucker (*Erimyzon sucetta*)
paddlefish (*Polyodon spathula*)

Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact these species.

The project is within the range of the sandhill crane (*Antigone canadensis*), a state threatened species. Sandhill cranes are primarily a wetland-dependent species. On their wintering grounds, they will utilize agricultural fields; however, they roost in shallow, standing water or moist bottomlands. On breeding grounds, they require a rather large tract of wet meadow, shallow marsh, or bog for nesting. If grassland, prairie, or wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 through August 31. If this habitat will not be impacted, this project is not likely to have an impact on this species.

Due to the potential for impacts to federally listed species, as well as to state-listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.

Water Resources: The Division of Water Resources has not conducted a project specific review and/or comments, however, the guidance provided below should be reviewed by the Environmental Review applicant for applicability on this project and subsequent compliance.

If the subject project is in a floodplain regulated by the Federal Emergency Management Agency (FEMA), the local floodplain administrator should be contacted concerning the possible need for any floodplain

permits or approvals. The FEMA National Flood Hazard Layer (NHFL) Viewer website can be utilized to see if the project is in a FEMA regulated floodplain. If the project is not in a FEMA regulated floodplain, then no further action is required.

Ohio Revised Code (ORC) Section 1521.16 mandates that any owner of a property or a facility that has the capacity of withdrawing 100,000 gallons per day (gpd) of water from groundwater, surface water, or both must register with the Division of Water Resources' Water Withdrawal Facilities Registration (WWFR) Program and report their withdrawals annually.

Additional coordination may be required depending on the location of the withdrawal and consumptive use. Restrictions or permitting may be required for:

- New or increased consumptive use of water averaging 2 million gallons per day (mgd) within 30 days within the Ohio River basin.
- New or increased withdrawal and consumptive water use in the Lake Erie watershed averaging 1 million gallons per day (mgd) or more in 90 days.
- New or increased water withdrawal directly from Lake Erie averaging 2.5 million gallons per day (mgd) or more in 90 days.
- Diversion or movement of water across the Ohio River and Lake Erie basin divide.

If the project does not involve activities that are subject to water withdrawal regulatory requirements as described above, then no further action is required. For more information, visit the Water Inventory & Planning website.

ODNR appreciates the opportunity to provide these comments. Please contact Mike Pettegrew (Environmental Services Administrator) at mike.pettegrew@dnr.ohio.gov if you have questions about these comments or need additional information.

Expiration: *ODNR Environmental Reviews are typically valid for 2 years from the issuance date. If the scope of work, project area, construction limits, and/or anticipated impacts to natural resources have changed significantly from the original project submittal, then a new Environmental Review request should be submitted.*

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
4625 Morse Road, Suite 104
Columbus, Ohio 43230
(614) 416-8993 / FAX (614) 416-8994

December 16, 2025

Project Code: 2026-0025829

Dear Mr. Norman:

The U.S. Fish and Wildlife Service (Service) has received your recent correspondence requesting information about the subject proposal. We offer the following comments and recommendations to assist you in minimizing and avoiding adverse impacts to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

Federally Threatened and Endangered Species: The endangered Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*) occur throughout the State of Ohio. The Indiana bat and northern long-eared bat may be found wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and breed that may also include adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, woodlots, fallow fields, and pastures. Roost trees for both species include live and standing dead trees ≥3 inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities. These roost trees may be located in forested habitats as well as linear features such as fencerows, riparian forests, and other wooded corridors. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet of other forested/wooded habitat. Bridges and culverts have also been used as roosts. Additionally, northern long-eared bats have been observed roosting in other human-made structures, such as buildings, barns, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves, rock crevices and abandoned mines.

Seasonal Restrictions for Federally Listed Bat Species: Should the proposed project site contain trees ≥3 inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, we recommend removal of any trees ≥3 inches dbh only occur between October 1 and March 31. If bridges or culverts will be impacted, we recommend reviewing Appendix K in the most recent "Range-Wide Indiana Bat & Northern Long-Eared Bat Survey Guidelines" to determine if the bridge/culvert may be suitable roost habitat. We recommend impacts to suitable bridges and culverts only occur from October 1 and March 31. These seasonal restrictions are recommended to avoid adverse effects to Indiana bats and northern long-eared bats.

If implementation of this seasonal restriction on tree cutting and impacting suitable bridge/culvert roosts is not possible, because the proposed project is ≥ 2.5 miles from the Indiana capture/detecton location(s), a summer survey may be conducted to document the presence or absence of Indiana bats and northern long-eared bats at the project site. The summer survey must be conducted by an approved surveyor (list attached) and be designed and conducted in coordination with the Ohio Field Office. In Ohio, summer mist net surveys may only be conducted between June 1 and August 15. We recommend that any Indiana bats and northern long-eared bats captured during the survey, especially reproductively active females and juveniles, be monitored through radio-tracking to determine roost locations.

If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are also warranted. Portal surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Ohio Field Office.

Survey results should be coordinated with this office prior to initiation of any work at the project area. Based on the results of the survey(s), we will evaluate potential impacts to the Indiana bat from the proposed project. If Indiana bats are not detected during the survey, then tree clearing and impacts to bridge/culvert roosts may occur at any time of the year.

Federally Proposed Species: On September 14, 2022, the Service proposed to list the tricolored bat (*Perimyotis subflavus*) as endangered under the ESA. The proposed project is in the vicinity of one or more recent confirmed records of tricolored bats. The bat faces extinction due to the impacts of white-nose syndrome, a deadly disease affecting cave-dwelling bats across the continent. During spring, summer, and fall, this species roosts primarily among leaf clusters of live or recently dead trees, emerging at dusk to hunt for insects over waterways and forest edges. While white-nose syndrome is by far the most serious threat to the tricolored bat, other threats now have an increased significance due to the dramatic decline in the species' population. These threats include disturbance to bats in roosting, foraging, commuting, and over-wintering habitats. Mortality due to collision with wind turbines, especially during migration, has also been documented across their range. Conservation measures for the Indiana bat and northern long-eared bat will also help to conserve the tricolored bat.

On December 12, 2024 the Service proposed to list the monarch butterfly (*Danaus plexippus plexippus*) as threatened under the ESA. Monarch butterflies are found throughout Ohio and some populations migrate vast distances across multiple generations each year. Many monarchs fly between the U.S., Mexico and Canada – a journey of over 3,000 miles. Monarch populations have declined significantly in recent years. Threats include habitat loss – particularly the loss of milkweed, the monarch caterpillar's sole food source – and mortality resulting from pesticide use. The Service recommends the following actions to maintain habitat and avoid impacts to monarchs in Ohio: revegetate disturbed areas with native plant species including nectar-producing plants and milkweed endemic to the area; limit mowing monarch habitat from March 15 to August 31 when monarchs are breeding and from September 1 to October 31 when large numbers of monarchs are migrating; and avoid the use of pesticides and herbicides in and near monarch habitat.

Section 7 Coordination: If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), then no tree clearing should occur on any portion of the

project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence. This letter provides technical assistance only and does not serve as a completed section 7 consultation document.

Stream and Wetland Avoidance: Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus is it important to conserve the functions and values of the remaining wetlands in Ohio (https://epa.ohio.gov/portals/47/facts/ohio_wetlands.pdf). We recommend avoiding and minimizing project impacts to all wetland habitats (e.g., forests, streams, vernal pools) to the maximum extent possible in order to benefit water quality and fish and wildlife habitat. Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the U.S. Army Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required.Best management practices should be used to minimize erosion, especially on slopes. Disturbed areas should be mulched and revegetated with native plant species. In addition, prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat. Should the project design change, or additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, coordination with the Service should be initiated to assess any potential impacts.

Thank you for your efforts to conserve listed species and sensitive habitats in Ohio. We recommend coordinating with the Ohio Department of Natural Resources due to the potential for the proposed project to affect state listed species and/or state lands. Contact Mike Pettegrew, Environmental Services Administrator, at (614) 265-6387 or at mike.pettegrew@dnr.ohio.gov.

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or ohio@fws.gov.

Sincerely,

Erin Knoll
Field Office Supervisor

cc: Matthew.Stooksbury@dnr.ohio.gov
Eileen.Wyza@dnr.ohio.gov

APPENDIX F

2025 JOINT GUIDANCE FOR BAT HABITAT AND TREE CLEARING

OHIO DIVISION OF WILDLIFE AND U.S. FISH AND WILDLIFE SERVICE (OH-FIELD OFFICE) JOINT GUIDANCE FOR BAT SURVEYS

MAY 2025

This document serves as guidance for state recommendations regarding tree clearing and/or subsurface disturbance as it relates to bats. This document also covers guidance for conducting bat surveys including summer mist-netting, acoustic surveys, and winter habitat assessments.

This document does not supersede any requirements listed on permits or facility certificates. All permit conditions must be strictly adhered to for permits to be valid and for renewal of permits beyond the existing year. This guidance applies to state recommendations only. Contact the USFWS to determine if federal consultation is also necessary to comply with federal law.

Agency Contacts:
ODNR-DOW Permit Coordinator: Stormy Gibson, Wildlife.Permits@dnr.ohio.gov, (614) 265-6315
ODNR-DOW Bat Survey Coordinator: Eileen Wyza, Eileen.Wyza@dnr.ohio.gov, (614) 265-6764
USFWS OHFO Endangered Species: Keith Lott, Keith_Lott@fws.gov, (380) 867-1308

Table of Contents

ODNR-DOW and USFWS OHFO Recommendations for Tree Clearing:

During the spring, summer, and early fall months, all bats in Ohio use trees as roosts. Several of the federally and/or state endangered species that occur in the state rely on trees for their maternity roosts where pups are born and raised until they are independent in the late summer. Because of the importance of forest habitats in the warmer months, tree clearing in Ohio is typically not recommended to occur between April 1st and September 30th each year. The recommended time to clear trees is between October 1st and March 31st. If seasonal clearing during those dates is not possible, both ODNR-DOW and USFWS OHFO recommend the following steps:

Step 1: Coordinate with **ODNR-DOW** and **USFWS OHFO** regarding existing records for state and federally listed endangered bat occurrence information. **ODNR-DOW** recommends that a full environmental review be completed (found HERE) and **USFWS OHFO** recommends that an IPAC form be filled out (found HERE) to determine presence of listed bat records. Then a request for technical assistance should be sent to Ohio@fws.gov with the subject line: Project submittal for review (IPaC#xxxx-xxxx).

Step 2: If recommended by either agency, conduct a presence/probable absence survey following current guidelines as outlined on page 7, where applicable.

Step 3: If a state-listed endangered bat is captured or recorded during the survey:

- Recommendation of no summer tree cutting, or limited summer tree cutting in certain situations within 5 miles of an Indiana bat and/or little brown bat capture or 3 miles of a northern long-eared bat and/or tricolored bat capture if a roost is not located.
- Recommendation of no summer tree cutting, or limited summer tree cutting, within a minimum of 2.5 miles of an Indiana bat or little brown bat roost or 1.5 miles of a northern long-eared bat or tricolored bat roost tree if located.
- Recommended tree clearing dates within capture record buffers are October 1 – March 31

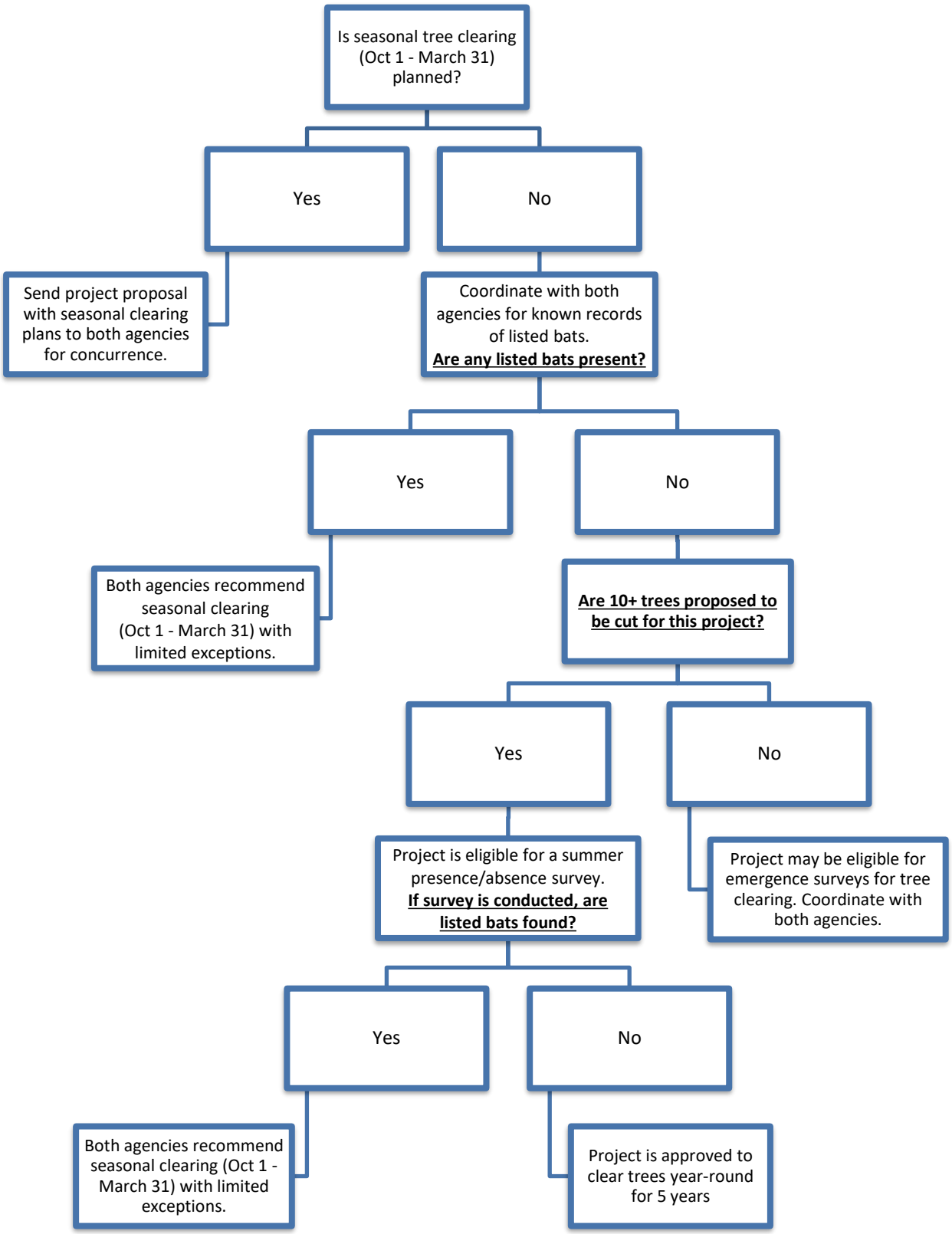
If no state-listed endangered bat is captured or recorded during the survey:

- Year-round (winter and summer) tree cutting may proceed for 5 years before a new survey is needed under state guidance.

*** Limited summer tree cutting guidance:** Limited summer tree cutting within a capture buffer may be permitted in certain circumstances after consultation with ODNR-DOW for projects that involve removal of 10 or fewer trees, removal of only conifers, and/or invasive species removal. These projects are handled on a case-by-case basis.

Tree Clearing around Hibernacula: Work involving tree clearing around hibernacula has the potential to impact hibernating bats. Trees within 0.25 miles of a hibernaculum portal play an important role in controlling wind, humidity, and temperature in the area, and they are also important roosting sites prior to the hibernation period. Therefore, a 0.25-mile buffer around known and/or potential hibernacula entrances is recommended. To assess the presence of a known and/or possible bat hibernaculum, ODNR-DOW recommends consulting with both agencies for nearby hibernacula records as well as performing a winter habitat assessment to search for potential hibernacula. For more information on how to perform a winter habitat assessment, please proceed to **Step 2** of **ODNR-DOW Recommendations for Subsurface Disturbance** on page 5 of this document. If any known and/or potential hibernacula are identified during project planning, please consult with ODNR-DOW and USFWS OHFO for further guidance.

The following flow chart can assist you in walking through the tree clearing guidance and decision-making process:



ODNR-DOW Recommendations for Subsurface Disturbance:

During late fall and throughout winter, Ohio's endangered bats hibernate in protected areas such as caves, underground mines, and rocky outcroppings. During this period, bats are susceptible to the disease White-Nose Syndrome. In order to minimize disturbance to hibernating bats, subsurface disturbance impacting the bedrock in Ohio is typically not recommended between November 15th and March 31st each year. The ideal time for bedrock-impacting subsurface disturbance is between April 1st and October 31st. For all projects, ODNR-DOW recommends the following steps:

Step 1: Coordinate with **ODNR-DOW** regarding existing records for state-listed bat hibernacula.

Step 2: If a project site does not contain known bat hibernacula:

- Conduct a winter habitat assessment of the project area. Begin by conducting a desktop assessment of potential caves, mines, karst features, rock ledges, etc. are present within 5 miles of the project area. Use the following tools to conduct this assessment:
    - ODNR Mines of Ohio Viewer
    - Karst Interactive Map
    - Topographic maps, photos, historical records, etc.
- If historical mines or other features with possible portal openings are discovered, do field checks where possible to investigate if portals are present.
- Any potential hibernacula found must address possible suitability for listed bats.

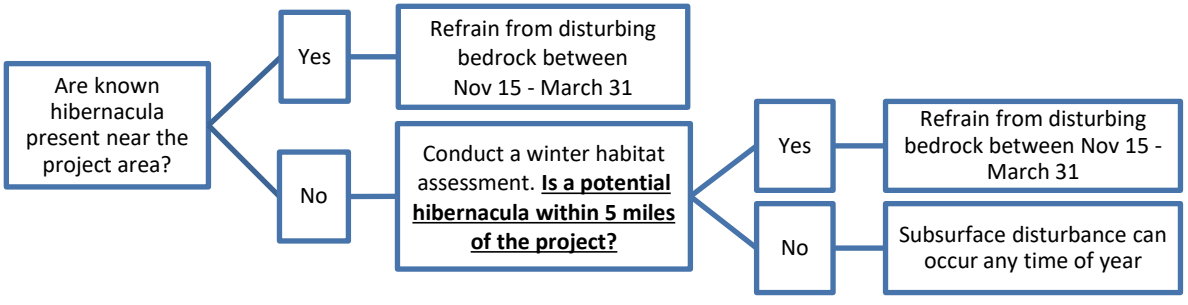
Step 3: Report results of the habitat assessment (and field assessment where applicable) to **ODNR-DOW Bat Survey Coordinator.** This can be a simple email or letter reporting distances to the nearest underground features and any other pertinent information regarding potential hibernacula to the project. Projects can expect the following recommendations in **ODNR-DOW's** response:

If potential hibernacula are found:

- Assume bats are using these hibernacula and refrain from subsurface disturbance impacting bedrock from Nov 15 – March 31.
- Avoid impacts on ledges and rock outcroppings where possible.

If no potential hibernacula are found**:**
Subsurface disturbance can occur any time of year.

The following flow chart can assist you in walking through the subsurface disturbance guidance and decision-making process:



ODNR-DOW and USFWS OHFO Recommendations for Bridges and Culverts

Bridges and culverts can provide suitable roosting habitat for numerous species of bats, including Indiana bats, Northern long-eared bats, Tricolored bats, and Little brown bats. Maternity roosts, hibernation sites, and temporary roosts have all been documented in bridges and culverts, making these structures potentially important year-round for endangered bats. For projects involving work on or around bridges and culverts that are at least 3 feet high and 23 feet long, ODNR-DOW and USFWS recommend the following:

Step 1: Coordinate with **ODNR-DOW** and **USFWS OHFO** regarding the bridge of culvert in question to determine if the structure is suitable for bats or if there are existing records of listed bats.

Step 2: If applicable, inspect the bridge or culvert for indications of bat presence, such as the following:

- Cracks or crevices at least 0.5” wide and 4” deep
- Unobstructed expansion joints
- Presence of urine and/or body staining on the structure
- Presence of guano

Step 3: Please consult with **ODNR-DOW** and **USFWS OHFO** for next steps after determining presence or probable absence of bats. Depending on the results, the agencies will provide guidance on timing and manner of structural work.

For more information, a more detailed explanation of conducting surveys for bats in bridges and/or culverts can be found in Appendix K (page 69) of the USFWS’ *Range-wide Indiana Bat & Northern Long-eared Bat Survey Guidelines (2024).*

Ohio Recommendations for Conducting Bat Surveys for Presence/Probable Absence

ODNR-DOW and USFWS OHFO Joint Guidelines follow the USFWS Range-wide Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines each year. This protocol may also be used for tricolored bat or the state-listed little brown bat with some minor modifications detailed below. To determine if a project is eligible for presence/probable absence surveys, please review **ODNR-DOW and USFWS OHFO Recommendations for Tree Clearing** (pgs. 3-4) of this document.

Ohio Mist-net Surveys

Due to the presence of White-Nose Syndrome (WNS), mist-netting in Ohio must be conducted between June 1 and August 15 unless stated otherwise in your state permit. ODNR-DOW and USFWS OHFO have determined that delaying netting activities until June 1 will provide additional recovery time for bats affected by WNS. For presence/probable absence surveys, netting will not be accepted outside of the June 1 - August 15 timeframe.

Mist-net Survey Levels of Effort:

To establish presence/probable absence of all federally and/or state-listed bats in Ohio, projects must use the highest required level of effort of the listed species. Use the table below for guidance on level of effort needed for each species using mist-net surveys. Please also note that the USFWS 2024 guidelines for the federally proposed tricolored bat follows the northern long-eared bat level of effort.

Species	**Nonlinear Projects (Net nights/0.5km[1])**	**Linear Projects (Net nights/km)**
Indiana Bat	6	2
Northern long-eared bat	10	4
Tricolored bat[2]	10	4
Little brown bat[3]	10	4

Federal guidance requires that a minimum of two (2) biologists (e.g., one permitted and one technician) must be on-site for every four (4) net-sets being operated. Exceptions may be allowed under extenuating circumstances, provided written justification is included in the proposed survey study plan and subsequently approved by the **USFWS OHFO** and **ODNR-DOW**.

Bat Bands:

Ohio provides three size bands for bats: 2.4 mm, 2.9 mm, and 4.2 mm. The 2.4 mm split metal bat ring made of aluminum alloy is suitable for banding tricolored bats. 2.9 mm bands are suitable for Indiana, northern long-eared, and little brown bats. The larger 4.2 mm band is suitable for silver-haired (*Lasionycteris noctivagans*), big brown (*Eptesicus fuscus*), and hoary (*Lasiurus cinereus*) bats. You must band all Indiana, northern long-eared, little brown, and tricolored bats with **ODNR-DOW** bands. Banding pliers are also now required for banding bats.

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[1] 0.5km = 123 acres

[2] State-endangered, federally proposed endangered

[3] State-endangered only

Ohio Acoustic Surveys

Acoustic bat surveys for projects that are eligible for summer presence/probable absence surveys will be accepted by **ODNR-DOW** and USFWS OHFO for the 2025 season. Surveys should follow guidelines laid out in the USFWS' *Range-wide Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines* (2024) with the following exceptions:

- Ohio survey dates are June 1 – August 15
- After conducting automated analyses using one or more of the currently available approved acoustic bat ID programs[4], qualitative analysis (i.e., manual vetting) of any calls recorded from state-endangered species must be completed.
- All presence/probable absence acoustic surveys conducted for state listed bat species should follow the highest minimum acoustic nights set forth in the federal guidance to be considered valid by **ODNR-DOW**. Any modifications to this position will be communicated at the time of the site authorization approval.

At a minimum, for each detector site/night a program considered presence of state-listed bats likely, review all files (including no IDs) from that site/night. If more than one acoustic bat ID program is used, qualitative analysis must also include a comparison of the results of each program by site and night.

Acoustic Survey Levels of Effort:

To establish presence/probable absence of all federally and/or state-listed bats in Ohio, projects must use the highest required level of effort of the listed species. Use the table below for guidance on the level of effort needed for each species using acoustic surveys. Please also note that the USFWS 2024 guidelines for the federally proposed tricolored bat follows the northern long-eared bat level of effort.

Species	**Nonlinear Projects (Net nights/0.5km)**	**Linear Projects (Net nights/km)**
Indiana Bat	10	4
Northern long-eared bat	14	4
Tricolored bat	14	4
Little brown bat	14	4

Combined Mist-netting and Acoustic Surveys

ODNR-DOW will accept the USFWS pilot survey option of combining mist-netting and acoustic surveys for traditional survey sites (e.g., 123-acre area) detailed in Appendix I of the USFWS Range-wide Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines (2024). All presence/probable absence combined mist-net and acoustic surveys conducted for state-listed bat species should follow the highest minimum level of effort set forth by the federal guidance to be considered valid by ODNR-DOW. Any modifications to this position will be communicated at the time of the site authorization approval.

[4] https://www.fws.gov/media/indiana-bat-summer-survey-guidance

Ohio Guidance for Bat Surveyors

The following guidance is intended for those individuals planning on conducting bat surveys for any purpose in the state of Ohio. The guidance includes guidance on needed permits before work can be conducted, guidance for conducting work during the field season, and guidance on post-field season reporting to **ODNR-DOW**.

Before Field Season:

- Anyone surveying bats involving handling of any kind in the state of Ohio must obtain a federal permit as well as a state scientific collection permit. The federal permit should include both the Indiana bat and the northern long-eared bat.
- Your **ODNR-DOW** scientific collector's permit should include all Ohio bat species.

- Prior to initiation of field work (a minimum of two weeks in advance), permittees must provide proposed mist-netting and/or acoustic survey plans to **USFWS OHFO** and **ODNR-DOW** in the form of an e-mail. Plans must be reviewed and approved by both agencies before ANY surveys take place. Study plans must include:
    - Objectives
    - Location details
    - Dates of proposed work
    - **USFWS Project Code**: Project Codes can only be obtained by requesting an official species list through the USFWS's Information for Planning and Consultation (IPaC) website: (https://ipac.ecosphere.fws.gov/)**.**

- Request bat bands at least two weeks in advance of needing them. Bat bands can be obtained by e-mailing the **ODNR-DOW Bat Survey Coordinator** with how many bands are needed, current permit number (both federal and state permits), sizes, and a mailing address. Bands will not be issued until permits are valid.

During Field Season:

- Only individuals who are named on the **ODNR-DOW** endangered species letter portion of the permit and on the corresponding federal bat permit may conduct and oversee mist-net surveys. Trained assistants may work on permitted bat activities under the direct and on-site supervision of a named permittee. All bat IDs must be verified by a named permittee.
- If an Indiana bat, northern long-eared bat, and/or tricolored bat is captured, the permittee shall notify the **USFWS** and the **ODNR-DOW Bat Survey Coordinator** referenced above within 48 hours via email. If a little brown bat is captured, notify the **ODNR-DOW Bat Survey Coordinator** only within 48 hours via email. Reports of listed bat captures should include specific information such as spatial location of capture, band information, radio-transmitter frequency information, sex, reproductive status, and age of individual.
- For presence/probable absence surveys, **ODNR-DOW** requires all female and juvenile state endangered and threatened bat species be radio-tracked if caught, in accordance with methods outlined in Appendix D of 2024 *USFWS Range-wide Indiana Bat Summer Survey Guidelines*.
- If you are taking any biological samples (tissue, fur, blood, etc.), this must be specifically authorized in your state and federal permits and noted in your survey proposal.

After Field Season:

By March 15, you must submit your final report(s) from the previous summer. Regarding specific reporting requirements, please refer to your permit or guidance from the USFWS OHFO. Please then forward a copy of the same report to the **ODNR-DOW Bat Survey Coordinator** and **ODNR-DOW Permit Coordinator**. Be sure to include your state permit number along with an electronic copy of the project report. Electronic summaries emailed during the field season are NOT considered as full compliance of this reporting requirement.

Frequently Asked Questions

When does the ODNR-DOW Bat Survey protocol have to be used?

This protocol should be used anytime Indiana bat, northern long-eared bat, little brown bat, or tricolored bat summer presence/probable absence surveys are conducted in the state of Ohio.

Can I use the Dkey for projects in Ohio?

The Dkey cannot be used to replace consultation with ODNR-DOW. Project proponents should coordinate directly with the ODNR-DOW for project technical assistance for all federally listed species. Additionally, **OHFO discourages the use of the Dkey for Ohio projects.** Contacting OHFO directly (ohio@fws.gov) for technical assistance for both the northern long-eared bat and Indiana bat is the more efficient process.

What disease protocols are required for bat surveys?

When handling bats, you must strictly adhere to the current WNS Decontamination Protocol (current version can be found at https://www.whitenosesyndrome.org/topics/decontamination). Clothing, boots, gear, and equipment should all be thoroughly decontaminated between nights, as well as between netting sites. I think we can delete this now.

How long are the results of the surveys valid for an assessment of an area?

Mist-net or acoustic surveys documenting probable absence of state-listed endangered bats are valid for five years.

When can acoustic or mist-net surveys occur in Ohio?

Acoustic or net surveys may only be conducted from June 1 through August 15 unless indicated otherwise in your state permit. Any surveys outside of the June 1 - August 15 timeframe cannot be used in Ohio to assess the presence/probable absence of state-listed bats.

Can I complete my acoustic surveys in a single night?

No. In accordance with the USFWS Range-wide Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines, survey efforts must be split across a minimum of 2 calendar nights.

Can a presence/probable absence survey be conducted within a known bat capture/detection buffer?

Surveys generally cannot be used to document presence/probable absence of state-listed endangered bats where presence of the species has already been confirmed by prior surveys.

Can I conduct a survey with less than the highest minimum effort and have it count as presence/probable absence for some species but not others in Ohio?

No. Ohio only accepts project proposals that use the highest level of effort required for bat surveys. So, for example, a project proposal meeting Indiana bat LOE requirements but not the other three species' LOE requirements will not be accepted as all species are considered potentially present statewide.

What if a project is proposing to clear trees between April 1 and September 30 when bats may be present, but no bat records exist in the project area?

Any Ohio project that is not within a known bat record buffer, and tree clearing between April 1 and September 31 is being proposed, may have a presence/probable absence survey conducted between June 1 and August 15 following the range-wide guidance. If a presence/probable absence survey is not performed, presence of listed bats is assumed.

Where do I get bands?

If you need bands, email the ODNR-DOW Bat Survey Coordinator at least two weeks in advance with your current ODNR permit number, how many bands in each size (2.4 mm, 2.9 mm, and 4.2 mm) you will need this season, and a current address to ship the bands.

Do I have to band every bat?

No, currently this is optional. However, you are required as per your state permit to band all Indiana, northern long-eared, little brown, and tricolored bats.